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NORTHREPPS HALL,
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7 June 1884

Dear Sir Richard

One line to thank
you very much for your
two interesting papers —
anything from you soon
is always valued by

Yours very truly
W. Curwen

With the Author
kind regards

DIURNAL BIRDS OF PREY.

A LIST
OF THE
DIURNAL BIRDS OF PREY,
WITH
REFERENCES AND ANNOTATIONS;
ALSO
A RECORD OF SPECIMENS
PRESERVED IN THE
NORFOLK AND NORWICH MUSEUM.

BY
JOHN HENRY GURNEY.

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P R E F A C E.

IN concluding, in the 'Ibis' for 1882, p. 598, my Notes on Mr. Sharpe's 'Catalogue of the Diurnal Birds of Prey in the British Museum,' I mentioned my intention of supplementing them by a tabular index for the convenience of future reference; it subsequently occurred to me that it might be useful to combine with this index a list of the several species and subspecies of Diurnal Birds of Prey, so far as I am acquainted with them, and to add references to a few of the works in which they have been figured, described, or otherwise noticed. This enlargement of my original intention and consequent increase of bulk has necessitated the publication of the following pages in a separate form rather than, as was originally proposed, in a number of the 'Ibis.' I have thought it convenient to arrange my matter in columns, of which the first contains the list of species or subspecies¹ and also the references to Mr. Sharpe's Catalogue; the second column refers to my Notes on that work, and to some other Notes which I have contributed to the pages of the 'Ibis'; the third comprises miscellaneous

¹ Those species and subspecies which I have not personally examined are marked with an asterisk, and those as to the validity of which I feel some doubt with a note of interrogation.

ferences to some of the works in which the several species are mentioned or described, and especially to those which contain information likely to prove useful to the ornithological student as to the habits of the birds and their geographical distribution, but for the most part excluding articles already referred to in my Notes. I have also given, where possible, references to at least one figure of each species. In the fourth column I have recorded the number of specimens of each species preserved in the Norwich Museum, in the hope of drawing attention not only to the interesting collection which there exists, but also to its desiderata, and of facilitating the acquisition of these, which I am anxious to promote, both as regards the collection of Diurnal Raptores and also of the Strigidae, in which group the Norwich Museum is already almost equally rich.

Since my Notes on Mr. Sharpe's volume were published in the 'Ibis,' I have seen occasion to modify my views as regards a few species, and have obtained additional information as to some others; and these results I have added to my present list in the form of footnotes, or, when too lengthy to be so introduced, in the shape of Appendices.

For the sake of convenience, I did not deviate much in my Notes from the arrangement adopted by Mr. Sharpe; but in the present list I have consulted my own views as to the most natural or, perhaps I should rather say, the least unnatural arrangement which I could adopt.

Every individual species being the centre of a group of approximate forms which resemble it in various degrees, it is obvious that a serial arrangement can only record with precision the connection of each genus and of each species with two of the forms which are thus grouped around it, and is therefore so far imperfect that it must of necessity disregard other natural connections, the existence of which

cannot be satisfactorily indicated by any method of consecutive linear arrangement; in any such system this imperfection seems to me to be unavoidable, but on that account it is the more important, in selecting from amongst various allied forms the two which shall serve as connecting links between any given genus or species and the portions of the series immediately preceding and succeeding it, to take into consideration every description of characteristic peculiarity, whether external or internal, and thus to secure a nearer approach to a natural sequence than could result from any arrangement based on one class of characters only, to the exclusion, more or less complete, of all others.

I am well aware that the method which I have here indicated is but imperfectly carried out in the following pages; but I have endeavoured to keep it in view to the best of my ability, and in doing so I have not always thought it desirable to place at the head of each subfamily that which may be considered as the typical genus, nor at the head of each genus the typical species, but rather to place in these positions the genus or the species which appears to me to approach the most nearly to that which immediately precedes it.

I may here mention a few matters which have come under my notice since my list of species was placed in the hands of the printers, one of these being that I have recently had an opportunity of examining the plates of Raptorial birds appended to Dr. Menzbier's 'Ornithological Geography of Russia,' and also his pamphlet (in French) on the 'Ornithology of the Governments of Moscow and Toula,' the latter having been kindly presented to me by the author. I confess that I am sceptical as to the validity of some newly-described species and subspecies of Birds of Prey referred to in these works; but I have no definite information to offer on

the subjeet beyond that whieh will be found in the 'Ibis' for 1883, p. 104, and in the 'Journal für Ornithologie' for 1883, pp. 410, 412, and 413, exeept that I have lately seen an adult pair of Faleons whieh were sent from Trans-Caueasia under the name of "*Falco peregrinus leucogenys*," one of the supposed subspeeies figured in Dr. Menzbier's volume, and that these Faleons appeared to me to be absolutely identieal with the paler speeimens of *Falco peregrinus* whieh oocur, not unfrequently, in Great Britain and in Western Europe; the male bird of this pair has been added to the collection in the Norwich Museum.

I have recently beeome aeqaainted with an additional faet relating to the geographicial distribution of *Tinnunculus neglectus*, whieh I think it desirable here to record.

Through the kindness of Count T. Salvadori, I have been enabled to examine two Kestrels obtained in Sehoa by the late Marquis Antinori; and after earefully eomparing them with speeimens of *Tinnunculus neglectus* in the British and Norwich Museums, I have come to the eonclusion that they are referable to this subspeeies, which is thus proved not to be exelusively insular.

Both speeimens are marked as females by the collector, but, judging from the charaeters of their plumage, I believe that they are both immature males. I made the following memorandum of their measurements:—

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
From Mahal.	9·0	1·50	1·20
From Arafia.	9·10	1·50	1·20

I regret to find that, as regards five speeies included in my list, an accidental error has oocurred in enumerating the speeimens in the Norwich Museum; the following are the

species referred to, with the correct number of the specimens of each :—

<i>Accipiter virgatus</i>	17	specimens.
<i>Accipiter nisoides</i>	21	„
<i>Baza reinwardti</i>	13	„
<i>Falco peregrinus</i>	53	„
<i>Falco biarmicus</i>	17	„

In addition to this correction I have to record several new specimens which have been acquired by the Norwich Museum whilst the following pages were passing through the press, viz. :—

¹ <i>Scelospizias toussenelii</i>	2	specimens.
<i>Aquila rapax</i>	1	specimen.
<i>Buteo brachypterus</i>	1	„

¹ These specimens consist of an adult female and of a young bird, which I believe to be a male of the same species. The following are their principal measurements, to which I have added, for comparison, those of an adult male which Capt. Shelley has kindly permitted me to take from a specimen in his collection :—

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
♂ immature	7.20	2.30	1.10
♂ adult	7.80	2.10	1.20
♀ adult	8.50	2.30	1.30

So far as I am aware the immature plumage of *Scelospizias toussenelii* has not been described; and I therefore add the following particulars of the coloration of the young male above referred to :—the entire upper surface is blackish brown, except that some feathers, especially those on the lesser wing-coverts, are very slightly edged with dull rufous-brown; on the tail are three cross bars nearly black, and darker than the other portions of the tail-feathers; the under surface is white, with a slight tinge of fulvous on the breast and abdomen; there is no chin-stripe, but a few spots of blackish brown are scattered over the upper breast; five broad bands of the same hue extend across the flanks to the sides of the lower breast; the under wing-coverts, tibiae, and crissum are an immaculate white, slightly tinged with fulvous.

<i>Haliastur girrenera</i>	.	.	.	.	1 specimen.
<i>Milvus melanotis</i>	.	.	.	.	4 specimens.
<i>Gypoictinia melanosternon</i>	.	.	.	.	1 specimen.
<i>Machæramphus alcinus</i>	.	.	.	.	1 "
<i>Tinnunculus sparverius</i>	.	.	.	.	2 specimens.
<i>Tinnunculus caribbæarum</i>	.	.	.	.	4 "
<i>Hypotriorchis severus</i>	.	.	.	.	1 specimen.
¹ <i>Æsalon columbarius</i>	.	.	.	.	1 "
<i>Pandion haliaetus</i>	.	.	.	.	2 specimens.
<i>Pandion leucocephalus</i>	.	.	.	.	1 specimen.

Allowing for the above-mentioned corrections, the Norwich Museum contains 385 species and subspecies of Diurnal Birds of Prey, represented by 2895 specimens; to which I may add that the collection of Owls there preserved consists of 171 species and subspecies, represented by 1009 specimens.

¹ This specimen is from the West-Indian island of St. Thomas, a locality which I believe has not been previously recorded for this species; it was presented to the Museum, together with four examples of *Tinnunculus caribbæarum*, by Mr. Edward Newton.

May 1884.

ERRATA.

P. 26. **Melierax canorus.** Column 2: refer to note 3, not to note 2.

P. 77. **Harpyhaliaeetus coronatus.** Column 1: refer to note 9, not to note 5.

P. 93. **Microhierax sinensis.** Column 1: add an asterisk.

P. 94. Column 1: for DISSODACTES read DISSODECTES.

P. 102. **Hypotriorchis religiosus.** Column 1: refer to note 3, not to note 2.

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L I S T
OF
DIURNAL BIRDS OF PREY.

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Family 1. SERPENTARIIDÆ. Genus 1. SERPENTARIUS. Species 1. secretarius (<i>Scop.</i>), p. 45.	Le Vaillant, <i>Ois. d'Afrique</i> , vol. i. p. 103 ¹ , pl. 25. Ayres, <i>Ibis</i> , 1859, p. 237; 1860, p. 203. J. H. G. Cat. of <i>Raptore</i> s in <i>Nor. Mus.</i> pt. 1, p. 8. Huxley, <i>P. Z. S.</i> 1867, pp. 441, 442, & 465. Sharpe's <i>Layard</i> , p. 8. Du Bocage, <i>Orn. d'Angola</i> , p. 6.	3 Skel. 2

¹ Le Vaillant figures this species under the name of "Le Mangeur des Serpens;" Mr. Ayres has applied to it the name of "*Sagittarius secretarius*;" I have used that of "*Serpentarius reptilivorus*" in my former Catalogue above referred to; and Professor Huxley, as also Senhor du Bocage, applies to it the appellation of "*Gypogeranus serpentarius*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
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1. gryphus (Linn.)	1875, 91 p. 20.	Humboldt et Bonpland, Recueil d'Observations, vol. i. p. 26, pls. 8 & 9 ² .	4
	92	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 37. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 18. Shufeldt, Contributions to Anatomy of Birds, pl. 20.	
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2. æquatorialis ? ³	" 93 Sharpe, p. 21. 270	○

¹ A very interesting article on the osteology of the Cathartidæ will be found in Dr. R. W. Shufeldt's "Contributions to the Anatomy of Birds" in the 12th Annual Report of the United States Geological and Geographical Survey, p. 727.

² Here referred to the genus *Vultur*.

³ I am indebted to Dr. Dubois, of the Brussels Museum, for a copy of the following memorandum, furnished to him by Mons. E. de Ville, Belgian Consul at Quito, on the subject of *Sarcorhamphus æquatorialis* :—

" *Le Sarcorhamphus æquatorialis* vit dans les Andes de la République de l'Equateur en même temps que le *S. gryphus*, mais il se tient toujours dans des altitudes différentes ; c'est une espèce parfaitement distincte et reconnue par les indigènes de la république ; il paraît qu'il est plus petit que le *gryphus* et que sa couleur se rapproche de celle du jeune de ce dernier."

I cannot agree with Mr. Sharpe in referring to *S. æquatorialis* the Condor figured by MM. Eydoux and Souleyet (*Voyage de la Bonite*, Ois. pl. 2), as those naturalists considered the bird they figured to be an immature *S. gryphus*, and there is nothing, I think, to indicate that they were mistaken in this view. There is now (July 1883) a Peruvian Condor living in the Gardens of the Zoological Society, which has been there since June 1877, and which is still in immature dress, unless it be, as it is labelled at the Gardens, an example of *S. æquatorialis*: the absence of any comb seems to denote that it is a female bird; but the iris instead of being garnet-coloured, as in the adult female of *S. gryphus*, is dark brown, which I suspect is an indication that the bird is not yet really adult.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
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Genus 3. PSEUDOGRYPHUS , p. 455. Species 1. californianus (<i>Shaw</i> & <i>Nodd.</i>), pp. 28, 455.	1875 , 94 95	Audubon, Birds of America, pl. 426. J. H. G. Cat. of Raptore in Nor. Mus. p. 39. Taylor, Ibis, 1859, p. 469; 1860, pls. 8 & 9. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 338. Ridgway, Bull. of Nuttall Orn. Club, vol. v. p. 82. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 24. Shufeldt, Contributions to Anatomy of Birds, pls. 16, 17, 18, & 19.	4² Skel. 1

¹ Here figured as "the King of the Vultures."

² One of these specimens is the nestling figured in the 'Ibis' for 1860, pl. 9. Mr. Sharpe includes this species in the genus *Rhinogryphus*; but I think it may be admitted as generically distinct, especially as having fourteen rectrices, a peculiarity first noticed by Audubon. Mr. Ridgway, in a recent letter, writes "this species is so nearly extinct that we have been trying unsuccessfully for years to get additional specimens;" he attributes this to the "wholesale use of poison for the destruction of wolves, bears, &c."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
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Species 1. aura (<i>Linn.</i>) pp. 25, 455.	1875, 93	Audubon, Birds of America, pl. 151. J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 42 ¹ . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 344. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 21. Sharpe, P. Z. S. 1881, p. 9. Shufeldt, Contributions to Anatomy of Birds, pls. 21 & 22.	12 Skel. 1
Subspecies a. falklandicus (<i>Sharpe</i>), p. 27, pl. 2. fig. 1.	.....	Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 24. Sclater & Salvin, Report on Birds of Antarctic America, Voyage of H.M.S. 'Challenger,' Zool. vol. ii. pt. 8, p. 105 ² .	2
Species 2. perniger (<i>Sharpe</i>) .. p. 26.	1875, 93	D'Orbigny, Voyage, Ois. p. 38, pl. 1. fig. 3 ² . Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 23. Taczanowski, P. Z. S. 1882, p. 47.	2
3. burrovianus (<i>Cass.</i>) p. 28, pl. 2. fig. 2.	" 93 " 94	Bonyan, P. Z. S. 1851, p. 54 ³ . Sclater, P. Z. S. 1863, p. 224.	4

¹ In my Catalogue of the Raptore in the Norwich Museum, as well as by some other authors, the genera *Pseudogryphus*, *Rhinogryphus*, and *Catharista* are all included under the head of *Cathartes*. In Mr. Ridgway's Notes on the American Vultures, published subsequently to his proposal of the generic term *Rhinogryphus*, he gives it as his opinion that the latter name must give way to the older term *Cathartes*; but I am not altogether convinced by his argument, and prefer to retain the generic name of *Rhinogryphus*.

² Described under the title of *Cathartes aura*.

³ Here referred to as "the Yellow-necked Carrion Crow."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
		J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 46. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 24. Ridgway, Bull. of Nuttall Orn. Club, vol. v. p. 83 ¹ .	
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1. atrata (<i>Bart.</i>), p. 24.	Audubon, Birds of America, pl. 106 ² . J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 47. Léotaud, Ois. de la Trinidad, p. 2 ² . Grayson, Memoirs of Boston Nat. Hist. Soc. vol. ii. p. 303. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 350. Ridgway, Bull. of Nuttall Orn. Club, vol. v. p. 87. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 19.	7
Family 3.			
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Genus 1.			
VULTUR.			
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1. monachus , <i>Linn.</i> ... p. 3.	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 67. Irby, Orn. of Gibraltar, p. 28.	3

¹ Mr. Ridgway, in the article here referred to, appears to prove satisfactorily that *Cathartes urubitinga* of Pelzeln is identical with and a subsequent synonym of *C. burrovianus* of Cassin; in the other notes above cited the specific name "urubitinga" has been used, as also in the figure given by Mr. Sharpe.

² Audubon refers to this species as *Cathartes iota*; Léotaud as *Cathartes fætens*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
VULTUR. 1. monachus (<i>continued</i>).		J. H. Gurney, jun., <i>Rambles of a Naturalist</i> , p. 128. Dresser, <i>Birds of Europe</i> , vol. v. p. 383, pl. 321. Sharpe, <i>Journ. of Linn. Soc. Zool.</i> vol. xiii. p. 2. Prjevalsky, <i>Rowley's Orn. Misc.</i> vol. ii. p. 139. David et Oustalet, <i>Ois. de la Chine</i> , p. 5.	
Subgenus A. LOPHOGYPS.			
Species 1. occipitalis (<i>Burch.</i>), p. 15.	.....	Hemprich and Ehrenberg, <i>Symbolæ Physiæ, Aves</i> , pl. 14 ¹ . Ayres, <i>Ibis</i> , 1859, p. 235; 1869, p. 287. J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 65. Sharpe's Layard, p. 5. Sharpe, <i>Journ. of Linn. Soc. Zool.</i> vol. xiii. p. 11. Du Bocage, <i>Orn. d'Angola</i> , p. 3.	3 Skel. 1
Genus 2. OTOGYPS. Species 1. auricularis (<i>Daud.</i>), p. 13.	1860 , 171 1873 , 324 1877 , 257 258	Le Vaillant, <i>Ois. d'Afrique</i> , p. 36, pl. 9 ² . Ayres, <i>Ibis</i> , 1859, p. 235; 1869, p. 287. J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 57. Sharpe's Layard, p. 4. Sharpe, <i>Journ. of Linn. Soc. Zool.</i> vol. xiii. p. 12.	2 Skel. 1

¹ Here figured as "*Vultur eulophus*."

² Described by le Vaillant under the name of "L'Oricou."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subspecies			
a. nubicus ? (H. Smith), p. 13 ¹.	.....	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 57 ¹ . J. H. Gurney, jun., Rambles of a Naturalist, p. 128.	3
Species	.....	Bree, Birds of Europe, 2nd edition, vol. i. p. 1, pl.	
2. calvus (Scop.), p. 14.	.....	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 56. Gould, Birds of Asia, pt. 12, pl. Hume, Nests and Eggs of Indian Birds, p. 1. Severtzoff, Ibis, 1875, p. 99. J. H. G. Stray Feathers, vol. vii. p. 170. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 13. Kelham, Ibis, 1881, p. 364. Davidson, Stray Feathers, vol. x. p. 285.	2
Genus 3.			
GYPS.			
Species			
1. fulvus (Gmel.), pp. 5 & 6 ² .	1875, 87 to 89	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 69. Newton's Yarrell, vol. i. p. 1. J. H. Gurney, jun., Rambles of a Naturalist, pp. 28, 39, 101, 129, & 223. Dresser, Birds of Europe, vol. v. p. 373, pls. 319 & 320. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 4. Seeböhm, British Birds, pt. 1, p. 4.	7
2. kolbii (Daud.), p. 8, pl. 1.	.....	Andersson, Birds of Damara Land, p. 5.	1

¹ United by Mr. Sharpe to *O. auricularis*, as also by myself in my former Catalogue.² As mentioned in my Notes, I do not consider as distinct Mr. Sharpe's subspecies "hispaniolensis."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
GYPS.			
2. <i>kolbii</i> (<i>continued</i>).		Sharpe's Layard, p. 1. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 9.	
3. <i>fulvescens</i> , <i>Hume</i> 1875, p. 7.	89 90	Hume, Nests and Eggs of Indian Birds, p. 5. Hume, Stray Feathers, vol. vii. p. 322. Davidson, Stray Feathers, vol. x. p. 285.	1
4. <i>himalayensis</i> , <i>Hume</i> , p. 8.	. . . . .	Hume, Nests and Eggs of Indian Birds, p. 3. Severtzoff, Ibis, 1875, p. 97. Hume, Stray Feathers, vol. vii. p. 323. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 8. Prjovalsky, Rowley's Orn. Misc. vol. ii. p. 141. David et Oustalot, Ois. de la Chine, p. 6.	2
5. <i>indicus</i> (<i>Scop.</i>), p. 10.	. . . . .	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 74. Hume, Rough Notes, p. 21. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 10.	3
Subspecies a. <i>pallescens</i> *?, <i>Hume</i> , p. 11.	. . . . .	Hume, Nests and Eggs of Indian Birds, p. 6. Hume, Stray Feathers, vol. vii. pp. 165, 325. Davidson, Stray Feathers, vol. x. p. 285.	○
Species 6. <i>tenuirostris</i> *?, <i>Hodg.</i> , p. 10 ¹.	. . . . .	Gray's Genera, vol. i. p. 6, pl. 3. Hume, Stray Feathers, vol. vii. p. 326.	○

¹ Mr. Sharpe gives *G. tenuirostris* as a synonym of *G. indicus*; but Mr. Hume (*l. c.*) states that it differs from "the Eastern *Gyps indicus* in the much slenderer bill and head."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
7. <i>rueppelli</i> , Bon., p. 9.	1868 , 138 1875 , 90	Rüppell, Atlas Vögel, p. 47, pl. 32 ¹ . J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 73. Blanford, Geol. & Zool. of Abyssinia, p. 285. Sharpe's Layard, p. 3. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 9.	4 Skel. 1
Genus 4. 1 PSEUDOGYPS.	Species		
1. <i>bengalensis</i> (Gmel.), p. 11.	1882 , 235	Gould, Birds of Asia, pt. 3, pl. Hume, Nests and Eggs of Indian Birds, p. 7. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 11. Kelham, Ibis, 1881, p. 364.	2 Skel. 1
2. <i>africanus</i> , Salv. p. 12.	.....	Sharpe, Journ. of Linn. Soe. Zool. vol. xiii. p. 11. Du Bocage, Orn. d'Angola, p. 1, pl. 9.	3
Genus 5. NEOPHRON.	Species		
1. <i>percnopterus</i> (Linn.), p. 17.	.....	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 50. Newton's Yarrell, vol. i. p. 6. Irby, Orn. of Gibraltar, p. 31. J. H. Gurney, jun., Rambles of a Naturalist, pp. 43, 129. Danford, Ibis, 1878, p. 2. Dresser, Birds of Europe, vol. v. p. 391, pl. 322. Sharpe's Layard, p. 6. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 13.	9 Skel. 1

¹ Here misnamed "Vultur kolbii."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
NEOPHRON.			
1. <i>percnopterus</i> (<i>continued</i>).		Du Bocage, Orn. d'Angola, p. 4. Seeböhm, British Birds, pt. 1, p. 11.	
Subspecies			
a. <i>ginginianus</i> (<i>Lath.</i>), p. 18.	.....	Hume, Nests and Eggs of Indian Birds, p. 9. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 15.	2
Species			
2. <i>monachus</i> (<i>Temm.</i>), p. 19.	1868, 137 138 1875, 91	Temminck, Pl. Col. pl. 222 ¹ . Blanford, Geol. & Zool. of Abyssinia, p. 287 ² .	4
Subspecies			
a. <i>pileatus</i> (<i>Burch.</i>) pp. 18, 455.	1868, 137 1875, 91	J. H. G. Cat. of Raptore in Nor. Mus. p. 53 ² . Sharpe's Layard, p. 7. Sharpe, Journ. of Linn. Soc. Zool. vol. xiii. p. 17 ² .	2
Family 4.			
FALCONIDÆ.			
Subfamily 1.			
GYPAËTINÆ.			
Genus 1.			
GYPAËTUS.	1877, 210		
Species			
1. <i>barbatus</i> (<i>Linn.</i>) p. 228.	,,	210	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 81. Irby, Orn. of Gibraltar, p. 38.
			Skel. 1
		Hume, Nests and Eggs of Indian Birds, p. 12.	
		Dresser, Birds of Europe, vol. v. p. 401, pls. 323, 324, & 325.	
		Prjevalsky, Rowley's Orn. Misc. vol. ii. p. 137.	

¹ Here referred to the genus *Cathartes*.² *N. monachus* and *N. pileatus* are here united under the latter name.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. ossifragus (Savign.), p. 230.	1868 , 136	David et Oustalet, Ois. de la Chine, p. 7. Rüppell, Systematische Uebersicht, p. 1, pl. 1 ¹ . J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 87 ¹ . Ayres, Ibis, 1864, p. 346 ¹ . Sharpe's Layard, p. 32.	2
Subfamily 2. <i>GYPOHIERACINÆ.</i>			
Genus 1. GYPOHIERAX.			
Species			
1. angolensis ² (Gmel.), p. 312.	1878 , 452	Gray, Genera of Birds, vol. i.	5
	458	p. 7, pl. 4.	Skel. 1
	459	Blanchard, Ibis, 1860, p. 94.	
		Du Chaillu, Explorations, p. 131. J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 79. Ussher, Ibis, 1874, p. 44. Sharpe's Layard, p. 45. Ayres, Ibis, 1877, p. 340.	
Subfamily 3. <i>POLYBORINÆ.</i>			
Genus 1. POLYBORUS.			
Species			
1. cheriway (Jacq.) p. 33.	1875 , 95	Audubon, Birds of America, pl. 161 ³ .	4 Skel. 1

¹ The specific name "meridionalis" is here used.² In my Notes I followed Mr. Sharpe in treating this remarkable species as an abnormal Sea-Eagle; but on further consideration I think it best to place it in a distinct subfamily.³ The specific name "brasiliensis" is here used. In my former Catalogue I did not distinguish between this species and *P. tharos*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
POLYBORUS.			
1. cheriway (<i>continued</i>).		Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 178.	
2. tharus (<i>Mol.</i>), p. 31.		Swainson, Zoological Illustrations, ser. 2, pl. 2 ¹ . J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 17. Selater, P.Z.S. 1876, p. 333, pl. 25 ² . J. H. G. P.Z.S. 1878, p. 230. Durnford, Ibis, 1877, p. 188; 1878, p. 398. Gibson, Ibis, 1879, p. 415.	3
3. lutosus , <i>Ridg.</i>		Ridgway, Monograph of Polybori, p. 459.	2
		Ridgway, Orn. of Guadeloupe Island, p. 192.	
Genus 2.			
SENEX .			
Species			
1. australis (<i>Gmel.</i>)	p. 38.	Temminck, Pl. Col. ⁴ pls. 192 & 224.	5
		J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 20.	Skel. 1
Genus 3.			
PHALCOBÆNUS.			
Species			
1. megalopterus	(<i>Mey.</i>), p. 36.	D'Orbigny, Voyage Ois. p. 51, pl. 2.	3
		J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 24.	

¹ The specific name "*brasiliensis*" is here used.

² One of the pale Caracaras figured in this plate is still living in the Gardens of the Zoological Society (August 1883).

³ The genera *Senex*, *Phalcobænus*, *Milvago*, and *Daptrius* are all included by Mr. Sharpe in the genus *Ibycter*.

⁴ Figured by Temminck as "*Falco novæ zealandiæ*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. carunculatus , Des Murs, p. 38.	.....	Selater, Ibis, 1861, p. 19, pl. 1. J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 25.	3
3. albigularis (Gould), p. 37.	.....	Gould, Zool. of Voyage of the Beagle, pt. 3, p. 13, pl. 1.	0
Genus 4.			
MILVAGO.			
Species			
1. chimango (Vieill.).. p. 41.	.....	Gray's Genera, vol. i. p. 10, pl. 5. J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 26. Durnford, Ibis, 1877, p. 188; 1878, p. 398. Gibson, Ibis, 1879, p. 420. White, P. Z. S. 1882, p. 623.	5
2. chimachima (Vieill.), pp. 39, 455.	.....	Jardine and Selby, Illustrations of Ornithology, pl. 2. J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 27. Salvin, Godman, and Simons, Ibis, 1880, p. 177.	6
Genus 5.			
DAPTRIUS.			
Species			
1. ater ¹ , Vieill., p. 35..	1875 , 95	Temminck, Pl. Col. pls. 37 & 342 ¹ . J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 29.	4
2. gymnocephalus *? (D'Orb.), p. 34.	.....	D'Orbigny, Voyage Ois. p. 50.	0

¹ "Gymnops fasciatus" of Spix must, I think, be considered a synonym of *Daptrius ater*; Temminck figures this species under the name of "Falco aterrimus."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 6.			
IBYCTER.			
Species			
1. americanus (<i>Bodd.</i>), pp. 35, 455.	.....	Buffon, Pl. Enl. vol. i. p. 110, p. 417 ¹ . J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 29.	4
Subfamily 4.			
CIRCAËTINÆ.	1878 , 87		
Species	88		
Genus 1.	,, 87		
HERPETOTHERES ² .			
Species			
1. cachinnans (<i>Linn.</i>), p. 278.	,, 145 146	Vieillot et Oudart, Galerie des Ois. p. 47, pl. 19. Ridgway, Studies of Ameri- can Falconidæ, p. 136. Grayson, Memoirs of Boston Nat. Hist. Soc. vol. ii. p. 300. Lawrence and Sumichrast, Birds of S.W. Mexico, Bull. U. S. Mus. no. 4, p. 41. Forbes, Ibis, 1881, p. 353.	4 Skel. 1
Genus 2.			
CIRCAËTUS.	,, 87		
Species			
1. gallicus (<i>Gmel.</i>).... p. 280.	,,	Schlegel, Valk Vogols, pp. 35, 70, pl. 24. fig. 1. Irby, Orn. of Gibraltar, p. 46. J. H. Gurney, jun., Rambles of a Naturalist, p. 130. Hume, Nests and Eggs of Indian Birds, p. 39.	8 Skel. 1

¹ Here figured and described as "Le petit Aigle d'Amérique."

² The genus *Herpetotheres* occupies, as it appears to me, a position intermediate between the American subfamily *Polyborinae* and the *Circaëtine* genera of the Old World.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. <i>cinerascens</i> , Müll., p. 285.		Dresser, Birds of Europe, vol. v. p. 563, pls. 349 & 350. Prjevalsky, Rowley's Misc. vol. ii. p. 145. David et Oustalet, Ois. de la Chine, p. 21.	5 Skel. 1
	1861 , 131 ¹	Heuglin, Ibis, 1860, pp. 410, 414, pl. 15 ¹ .	
3. <i>fasciolatus</i> , Gray . . . p. 285.	1878 , 146	Du Boeage, Orn. d'Angola, to 148 p. 38.	2
	1861 , 130	Ayres, Ibis, 1862, p. 35, pl. 3.	
	1868 , 139	Sharpe's Layard, p. 45.	
4. <i>beaudouinii</i> , Verreaux & Des Murs, p. 284.	1878 , 148	Böhm, Journ. für Orn. 1882, to 150 p. 203.	7
	1861 , 131 ²	Verreaux et Des Murs, Ibis, 1862, p. 212, pl. 7.	
5. <i>pectoralis</i> , Smith . . . p. 282.	1868 , 139	A. Smith, S. Africen Quart. Journ. vol. i. p. 109.	11 Skel. 1
	1878 , 150	Von Heuglin, Ibis, 1860, to 160 p. 413.	
	1880 , 258	Ayres, Ibis, 1860, p. 203; 1877, p. 341; 1878, p. 281.	
6. <i>cinereus</i> ³ , Vieill. . . p. 282.	1878 , 150	Du Boeage, Orn. d'Angola, to 152 p. 37.	7
	160	Vieillot, N. Diet. vol. xxiii. to 164 p. 445.	
	164	Vieillot et Oudart, Gal. Ois. to 352 pl. 12.	
	1880 , 258	Rüppell, Neue Wirbel. Vogel, p. 351, pl. 14 ⁴ .	
		Von Heuglin, Ibis, 1860, p. 413.	
		Du Boeage, Orn. d'Angola, p. 34.	

¹ There called "Circaetus zonurus" and "Circaetus melanotis."

² In this Note two immature specimens of *C. beaudouinii* in the Norwich Museum were erroneously referred to *C. gallicus*.

³ Mr. Sharpe unites *C. pectoralis* and *C. cinereus*.

⁴ Here figured under the name of "Falco funereus."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 3. SPILORNIS.	1878 , 87 88		
Species 1. undulatus ¹ (<i>Vig.</i>) .. p. 287.	,, 89 to 97 145	Gould, Century, pl. 1 ¹ . Hume, Nests and Eggs of Indian Birds, p. 40 ¹ . David et Oustalet, Ois. de la Chine, p. 21 ¹ . Oates, Birds of British Burmah, vol. ii. p. 193.	8 Skel. 1
Subspecies a. albidus ² (<i>Cuv.</i>) pp. 289, 458.	,, 90 to 97 1882 , 235	Temminck, Pl. Col. pl. 19 (immature). Swinhoe, Ibis, 1870, p. 85. Hume, Nests and Eggs of Indian Birds, p. 42. Hume, Stray Feathers, vol. iv. p. 358. Cripps, Stray Feathers, vol. vii. p. 247. David et Oustalet, Ois. de la Chine, p. 22. Bingham, Stray Feathers, vol. ix. p. 144. Oates, Birds of British Burmah, vol. ii. p. 194.	4
b. spilogaster ³ (<i>Blyth</i>), p. 289.	1878 , 97 to 100	Legge, Birds of Ceylon, p. 61.	13
c. bido ³ (<i>Horsf.</i>), p. 290.	,, 100	Schlegel, Valk Vogels, pl. 22.	2
d. davisoni ³ , <i>Hume</i> .. p. 289.	,, 98 99	Hume, Stray Feathers, vol. ii. p. 147, vol. iv. p. 281.	2 Skel. 1

¹ Mr. Sharpe and some other authors use for this species the specific name "cheela;" Mr. Gould the generic name "Hæmatornis."

² I think that *S. melanotis* and *S. rutherfordi* may be regarded as synonyms of *Falco albidus* of Cuvier and Temminck (*vide* 'Ibis,' 1878, p. 97), though in a subsequent paper I, through inadvertence, used the specific name *rutherfordi*; the latter is the name applied to it by Mr. Cripps, Captain Bingham, and Mr. Oates in the notes above referred to.

³ Mr. Sharpe uses for *S. bido* the specific name "bacha," and comprises *S. spilogaster* and *S. davisoni* under that of "melanotis." Professor Schlegel figures the Java race under the specific name of "bacha," and merges the genus *Spilornis* in *Circaetus*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. elgini (<i>Tyt.</i>), p. 291.	1878 , 101	Hume, <i>Stray Feathers</i> , vol. ii. p. 144.	3
3. pallidus , <i>Wald.</i> p. 290, pl. 9.	,, 101	Walden, <i>Ibis</i> , 1872, pp. 363, 364. Nicholson, <i>Ibis</i> , 1882, p. 52.	5
4. minimus , <i>Hume</i> p. 459.	,, 101 102	Hume, <i>Stray Feathers</i> , vol. i. p. 464, vol. iv. p. 282.	1
5. rufipectus , <i>Gould</i> .. p. 291.	,,	Gould, <i>Birds of Asia</i> , pt. 12, pl. Schlegel, <i>Valk Vogels</i> , pp. 37, 72, pl. 23. figs. 1, 2, & 3 ¹ .	5
Subspecies a. sulaensis ? (<i>Schleg.</i>), p. 292.	,,	Schlegel, <i>Valk Vogels</i> , pp. 38, 72, pl. 23. figs. 4, 5, & 6 ¹ .	2
Species 6. holospilus (<i>Vig.</i>) .. p. 293.	,,	Gray's <i>Gen.</i> vol. i. pl. 7 ¹ (immature). Fraser, <i>Zool. Typ.</i> pl. 29 ² (adult). Tweeddale, <i>P. Z. S.</i> 1877, pp. 689, 757, 821; 1878, pp. 340, 939; 1879, p. 69.	6
Genus 4. DRYOTRIORCHIS.	,, 87		
Species 1. spectabilis (<i>Schleg.</i>), p. 279.	,, 88	J. H. G. <i>P. Z. S.</i> 1880, p. 621, pl. 58.	1
Genus 5. EUTRIORCHIS.	,, 87		
Species 1. astur , <i>Sharpe</i>	,, 88	Sharpe, <i>P. Z. S.</i> 1875, p. 70, pl. 13. Milne-Edwards et Grandier, <i>Ois. de Madagascar</i> , vol. i. p. 31, and vol. ii. pls. 9b & 9c.	0

¹ Here referred to *Circaetus*.² Here referred to *Hæmatornis*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 6. HELOTARSUS.	1878 , 87 352		
Species 1. ecaudatus (Daud.) . . . p. 300.	1868 , 140 1878 , 353 to 356	Des Murs, in Lefebvre's Voyage en Abyssinie, Skel. 1 Zool. p. 66, pl. 11. Ayres, Ibis, 1862, p. 35. Sharpe's Layard, p. 48. Du Bocage, Orn. d'Angola, p. 41.	4
Subspecies a. leuconotus , Rüpp., p. 301.	1868 , 140 141 1878 , 353 354	Sharpe's Layard, p. 49. Du Bocage, Orn. d'Angola, p. 42.	1
Subfamily 5. GYMNOGENYNÆ.			
Genus 1. POLYBOROIDES.			
Species 1. radiatus (Scop.) . . . p. 48.	1869 , 451	J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 90.	4
		Newton, Ibis, 1863, p. 338 ¹ .	
		Milne-Edwards et Grandier, Ois. de Madagascar, vol. i. p. 50, vol. ii. pls. 15, 16, 16 a, 17, & 18.	
2. typicus , Smith, p. 48	1859 , 153 ² 1868 , 146 1875 , 221	Smith, Ill. Zool. of S. Africa, Aves, pls. 81 & 82.	15
		Ayres, Ibis, 1859, p. 237 ² ; 1862, p. 35 ² .	
		J. H. G. Cat. of Raptore in Nor. Mus. pt. 1, p. 12.	
		Ridgway, Cat. of Falconidæ in Boston Mus. pp. 42, 43.	
		Sharpe's Layard, p. 9.	
		Du Bocage, Orn. d'Angola, p. 7.	

¹ Here referred to under the specific name "madagascariensis."

² Here referred to under the specific name "radiatus."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subfamily 6. <i>CIRCINÆ.</i> Genus 1. <i>CIRCUS.</i> Species			
1. <i>cyanus</i> (Linn.), p. 52 p. 55.	1875, 222	Newton's Yarrell, vol. i. p. 132. J. H. Gurney, jun., Ibis, 1871, p. 72. Irby, Orn. of Gibraltar, p. 32. Scully, Stray Feathers, vol. iv. p. 125. Dresser, Birds of Europe, vol. v. p. 431, pl. 329. Prjevalsky, Rowley's Orn. Mise. vol. ii. p. 154. David et Oustalet, Ois. de la Chine, p. 27. Seully, Ibis, 1881, p. 421. Seeböhm, British Birds, pt. 1, p. 128.	29
2. <i>hudsonius</i> (Linn.). p. 55.	,, 222	Swainson and Richardson, Fauna Bor.-Amer. pt. 2, p. 55, pl. 29 ¹ . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 214 ² .	23
3. <i>macrurus</i> (Gmel.) .. p. 67.	,, 222	Hume, Stray Feathers, vol. i. p. 160 ³ . Irby, Orn. of Gibraltar, p. 33. J. H. Gurney, jun., Rambles of a Naturalist, p. 144. Dresser, Birds of Europe, vol. v. p. 441, pl. 330 ⁴ .	30

¹ There called "*Circus cyanus*, var. *americanus*."² There called "*Circus cyanus*, var. *hudsonius*."³ The specific name "*pallidus*" is here used.⁴ Mr. Dresser uses the specific name "*swainsoni*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
CIRCUS. 3. macrurus (<i>continued</i>)		Sharpe's Layard, p. 11. David et Oustalet, Ois. de la Chine, p. 28. Legge, Birds of Ceylon, p. 17. Seully, Ibis, 1881, p. 421. Oates, Birds of British Burmah, vol. ii. p. 175.	
4. cineraceus ¹ (<i>Mont.</i>) p. 64.	1875 , 222 223	Montagu, Orn. Diet. vol. i. letter F ² . Newton's Yarrell, vol. i. p. 138. Irby, Orn. of Gibraltar, p. 32. J. H. Gurney, jun., Rambles of a Naturalist, p. 145. Dresser, Birds of Europe, vol. v. p. 423, pl. 328. Sharpe's Layard, p. 12 ¹ . David et Oustalet. Ois. de la Chine, p. 28 ¹ . Legge, Birds of Ceylon, p. 12. Seully, Ibis, 1881, p. 421. Soebohm, British Birds, pt. 1, p. 131. Oates, Birds of British Burmah, vol. ii. p. 173 ¹ .	23 Skel. 2
5. maurus (<i>Temm.</i>) p. 60.	.....	Temminek, Pl. Col. pl. 461 ² . Sharpe's Layard, p. 13.	3
6. cinereus (<i>Vieill.</i>) p. 56.	.....	Quoy et Gaimard, Voyage de l'Uranie, pls. 15 & 16 ³ . D'Orbigny, Voyage Ois. p. 110. Durnford, Ibis, 1877, p. 187; 1878, p. 397. Gibson, Ibis, 1879, p. 411.	19
7. maculosus (<i>Vieill.</i>) p. 62.	.....	Temminek, Pl. Col. pl. 22 ⁴ . D'Orbigny, Voyage Ois. p. 112 ⁴ .	7

¹ Described by Mr. Sharpe under the specific name "pygargus," also by David and Oates.

² Here referred to the genus *Falco*.

³ Here referred to as "*Falco histrionicus*."

⁴ Referred to in both these articles under the specific name "*macropterus*." Temminek figures this species under the name "*Falco palustris*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
8. <i>melanoleucus</i> (<i>Forst.</i>), p. 61.	1868 , 356 1870 , 445 1875 , 222 (footnote) " 225 " to 228 1882 , 235	Léotaud, Ois. de la Trinid- dad, p. 49 ¹ . Anderson, Western Yun- nan, vol. i. p. 572, pls. 45 & 46. David et Oustalet, Ois. de la Chine, p. 29. Legge, Birds of Ceylon, p. 9. Cripps, Stray Feathers, vol. x. p. 327. Oates, Birds of British Bur- mah, vol. ii. p. 172.	13
9. <i>maillardi</i> , <i>Verr.</i> . . . p. 59.	1869 , 450 451 1875 , 228 to 232 1876 , 279	Slater, Ibis, 1863, p. 163, pl. 4. Milne-Edwards et Grandi- dier, Ois. de Madagascar, vol. i. p. 9; vol. ii. pls. 29, 29 b. fig. 3, & pl. 29 c. fig. 3.	3
Subspecies a. <i>macroscelis</i> , <i>Newt.</i> p. 73.	1869 , 451 1875 , 229 to 232 1876 , 278	Milne-Edwards et Grandi- dier, vol. i. p. 90; vol. ii. pls. 27, 28, 29 b. fig. 2, & pl. 29 c. fig. 2.	3²
Species 10. <i>wolfi</i> , <i>Gurn.</i> , p. 73 (footnote)	1873 , 421 422 1875 , 225 1876 , 384	J. H. G. P. Z. S. 1865, p. 823, pl. 44. Buller, Birds of N. Zealand, Intr. p. 15. Salvadori, Orn. della Papu- asia e delle Molucche, pt. 1, p. 72. E. L. and E. L. C. Layard, Ibis, 1882, p. 500.	6³
11. <i>approximans</i> . . . Peale, p. 72.	1870 , 536 1875 , 225	Peale, Zool. U. S. Exp., Birds (first edition), p. 64.	14

¹ See note 4, p. 20.² One of these specimens is the type described by Professor Newton in P. Z. S. 1863, p. 180, and by Mr. E. Newton in 'Ibis,' 1863, p. 337.³ Two of these specimens are the types figured in P. Z. S. 1865, pl. 44.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwicheh Museum.
CIRCUS.			
11. approximans (<i>continued</i>).	1876 , 384 ¹	Bonaparte, Conspectus, vol. i. p. 34 ¹ . Gould, Birds of Australia, vol. i. pl. 26 ² . Buller, Birds of N. Zealand, p. 11, pl. & Intr. p. 15 ¹ .	
12. spilothorax* , <i>Salv.</i>	.....	Salvadori and D'Alberti, Ann. Civ. Gen. vol. vii. p. 807.	O
13. spilonotus ³ , <i>Kaup</i> , p. 58.	1875 , 225	Salvadori, Orn. della Papuasia e delle Molueche, pt. 1, p. 71. Swinhoe, Ibis, 1863, p. 213, pl. 5. Prjevalsky, Rowley's Orn. Misc. vol. ii. p. 154. David et Oustalet, Ois. de la Chine, p. 29. Sharpe, Ibis, 1876, p. 30; 1879, p. 235.	13
14. aeruginosus ³ (<i>Linn.</i>), p. 69.	1875 , 223 225 1882 , 235	Newton's Yarrell, vol. i. p. 127. Irby, Orn. of Gibraltar, p. 33. J. H. Gurney, jun., Rambles of a Naturalist, p. 144. Ayres, Ibis, 1871, p. 147. Scully, Stray Feathers, vol. iv. p. 126.	29

¹ I find that the Harrier of the Fiji Islands (*Circus approximans*) is, as stated in Mr. Sharpe's volume, identical with *C. gouldi* of Australia and New Zealand.

In my last note in the 'Ibis,' above referred to, I mentioned that as the only Fijian Harrier which I had examined was immature, I felt doubtful whether it should be referred to *C. gouldi* or to *C. wolfi*; but I have since ascertained its identity with the former by the inspection of two adult males, kindly lent to me by Captain Wardlaw Ramsay, which were obtained by Mr. Layard at Bua-Vanua Levu in the Fiji Islands.

As the specific name "approximans" was applied by Peale to this Harrier in 1848, it has priority over that of "gouldi," proposed for it by Bonaparte in 1850 and adopted in Mr. Sharpe's volume and also in my notes, as well as in Mr. Buller's 'Birds of New Zealand.'

² Herc figured under the incorrect name "*Circus assimilis*."

³ See Appendix A.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
		<p>Dresser, Birds of Europe, vol. v. p. 415, pls. 326 & 327¹. Rowley, Orn. Misc. vol. ii. p. 65, pl. 45. David et Oustalet, Ois. de la Chine, p. 30. Legge, Birds of Ceylon, p. 5. Scully, Ibis, 1881, p. 422. Sharpe's Layard, p. 16. Du Bocage, Ois. d'Angola, p. 9. Seebohm, British Birds, pt. 1, p. 124. Oates, Birds of British Burmah, vol. ii. p. 176.</p>	
15. ranivorus (Daud.), p. 71.	.....	<p>Le Vaillant, Ois. d'Afrique, vol. i. p. 95, pl. 23². Ayres, Ibis, 1868, p. 464; 1878, p. 283. Sharpe's Layard, p. 14. Du Bocage, Orn. d'Angola, p. 11.</p>	16 Skel. 1
16. humbloti ^{*³} , Milne-Ed. et Grand.	.....	Milne-Edwards et Grandier, Ois. de Madagascar, vol. ii. pls. 29 a, 29 b. figs. 1, 1 a, & 1 b, & pl. 29 c. figs. 1 & 1 a.	0
17. assimilis ⁴ (Jard. & Selb.), p. 63.	1875 , 225	<p>Gould, Birds of Australia, vol. i. pl. 27. Schlegel, Valk Vogels, pp. 29, 67, pl. 20. figs. 2 & 3. Tweeddale, Collected Works, p. 141.</p>	11

¹ See Appendix A.² Here figured under the name of "Le Grenouillard."³ The description of this species is expected to appear in the "Appendix" to the work of Messrs. Milne-Edwards and Grandier.⁴ The geographical distribution of *Circus assimilis* (*C. jardini* of Gould's 'Birds of Australia') is extremely curious, the only localities out of Australia in which it exists being (so far as I have been able to ascertain) Tasmania and Celebes.

I may add that the only Tasmanian specimen I have seen is an immature bird obtained in 1840 and preserved in the Norwich Museum.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subfamily 7. <i>ACCIPITRINÆ.</i>			
Genus 1. <i>MICRASTUR.</i>			
Species			
1. <i>melanoleucus</i> ¹ (<i>Vieill.</i>), p. 75.	1879, 171 (footnote)	Temminck, Pl. Col. pls. 116 (immature) and 141 (adult) ¹ . Selater and Salvin, P. Z. S. 1869, p. 365.	7
		Grayson, Memoirs Boston Soc. Nat. Hist. vol. ii. p. 299.	
		Cabot, Boston Journal Nat. Hist. vol. iv. p. 462.	
		Lawrenco and Sumichrast, Birds of S.W. Mexico in Bull. U. S. Mus. no. 4, p. 40.	
		Ridgway, Proc. of Acad. of Nat. Sciences of Philadelphia, 1875, p. 482.	
2. <i>amaurus</i> , <i>Gurn.</i> . . .	1879, 171	. . . . .	1 ²
3. <i>mirandollei</i> (<i>Schleg.</i>), p. 76.	. . . . .	Selater and Salvin, P. Z. S. 1869, p. 365.	2
		Ridgway, Proc. Acad. Nat. Sciences of Philadelphia, 1875, p. 485 ³ .	
		Taczanowski, P. Z. S. 1882, p. 47.	

¹ Mr. Sharpe uses for this species the specific name "semitorquatus;" Temminck figures it as "Falco brachypterus."

² This specimen is one of the two types of the species, the other being in the collection of Messrs. Salvin and Godman.

³ Mr. Ridgway here gives the only description with which I am acquainted of the immature plumage of *M. mirandollei*. I may mention that both the specimens contained in the Norwich Museum were obtained in Guiana; these and the few others which I have seen are in adult plumage, and the immature dress is only known to me from Mr. Ridgway's description.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
4. <i>guerilla</i> ¹ , <i>Cass.</i> , p. 79	.....	Cassin, <i>Journ. Phil. Acad.</i> vol. i. pl. 40.	7
Subspecies		Sclater and Salvin, <i>P. Z. S.</i> 1869, p. 367.	
a. <i>jugularis</i> ¹ , <i>Gurn.</i> n. sp.	.....	Ridgway, <i>Proc. Acad. Nat. Sciences of Philadelphia</i> , 1875, p. 486.	6
Species		.....
5. <i>ruficollis</i> ¹ (<i>Vieill.</i>)	1875, 232	Temminck, <i>Pl. Col. pls.</i> 92	7
	p. 76.	& 306 ² .	
6. <i>zonothorax</i> ¹ (<i>Cab.</i>),	,, 232	Ridgway, <i>Proc. Acad. Nat.</i>	0
	p. 79.	<i>Sciences of Philadelphia</i> ,	
7. <i>gilvicollis</i> ¹ (<i>Vieill.</i>),	,, 232	D'Orbigny, <i>Voyage, Ois.</i> p.	5
	p. 78.	233 88 ³ .	
Genus 2.			
GERANOSPIZIAS.	,, 233		
Species			
1. <i>gracilis</i> ⁴ (<i>Temm.</i>)	,, 233	Temminck, <i>Pl. Col. pl.</i> 91.	5
	p. 81.	Ridgway, <i>Cat. of Falco-</i>	
		<i>nidæ in Boston Mus.</i> p. 43.	
2. <i>cærulescens</i>	,, 233	Temminck, <i>Pl. Col. pl.</i> 3.	3
	(<i>Vieill.</i>), p. 81.	234 Ridgway, <i>Cat. of Falco-</i>	
		<i>nidæ in Boston Mus.</i> p. 43.	

¹ As to the several species here numbered 4, 4a, 5, 6, and 7 (and the synonyms of some of them) see Appendix B, where I have treated *M. leucauchen* as a synonym of *M. ruficollis*; *M. concentricus* and *M. pelzelni* I have treated as synonyms of *M. gilvicollis*.

² Temminck's plates are severally entitled "Falco xanthothorax" and "Falco leucauchen."

³ Described by D'Orbigny under the title of "Nisus concentricus."

⁴ Mr. Sharpe treats *G. gracilis* and *G. cærulescens* as belonging to the same species; but they appear to me to be distinct. *G. gracilis* is the "Aplomado" of Azara, and *G. cærulescens* is the "Falco hemidactylus" of Temminck; *G. gracilis* is the more Eastern, *G. cærulescens* the more Western species, both being South-American.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
GERANOSPIZIAS.			
Species			
3. niger (<i>Du Bus</i>), p. 82.	1875 , 233	Du Bus, <i>Esquisses Orn.</i> pl. 16.	6
		Ridgway, <i>Cat. of Falconidae</i> in Boston Mus. p. 45.	
		Grayson, <i>Memoirs of Boston Nat. Hist. Soc.</i> vol. ii. p. 299.	
		Lawrence and Sumichrast, <i>Birds of S.W. Mexico</i> , in <i>Bull. U. S. Mus.</i> no. 4, p. 39.	
Genus 3.			
UROTRIORCHIS.			
Species			
1. macrurus (<i>Hartl.</i>)...	,, 234	Sharpe, <i>Ibis</i> , 1870, p. 58, pl. 3 ¹ .	2
p. 83.			
Genus 4.			
MELIERAX.			
Species			
1. canorus (<i>Risl.</i>), p. 87	1868 ² , 145	Le Vaillant, <i>Ois. d'Afrique</i> , p. 117, pl. 27 ² .	8
	1875 , 235	Ayres, <i>Ibis</i> , 1869, p. 289; 1877, p. 340 ³ .	
		Sharpe's Layard, p. 17.	
2. poliopterus , <i>Cab.</i>...	.....	Shelley, <i>P. Z. S.</i> 1882, p. 305.	0
p. 88.			
3. polyzonus (<i>Riipp.</i>)	1875, 235	Rüppell, <i>Neue Wirbel. Vögel</i> , p. 36, pl. 15.	10
p. 88.		Drake, <i>Ibis</i> , 1869, p. 153.	
		Irby, <i>Orn. of Gibraltar</i> , p. 35.	
		Sharpe's Layard, p. 18.	Skel. 1

¹ Here referred to the genus *Astur*.² Here figured under the name of "Le Faucon chanteur."³ The specific name "musicus" is here used.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
4. mechowi? *, <i>Cab...</i>		Du Bocage, Orn. d'Angola, p. 12. Du Bocage, 21st West African List, p. 1, & 22nd, p. 8.	
5. metabates? *	v. Heugl., p. 92.	Cabanis, Journ. für Orn. 1882, p. 229.	○
6. gabar ¹ (<i>Daud.</i>), p. 89	1868, 145 1875, 235 236	Levaillant, Ois. d'Afrique, p. 136, pl. 33 ¹ . Sharpe's Layard, p. 19. Du Bocage, Orn. d'Angola, p. 15.	19
7. niger (<i>Bonn. et Vieill.</i>)	p. 91.	Vicillot et Oudart, Gall. des Ois. vol. i. pl. 22. Ayres, Ibis, 1878, p. 282. Sharpe's Layard, p. 20. Du Bocage, Orn. d'Angola, p. 16. Shelley, P.Z.S. 1882, p. 305.	6
Genus 5. ASTURINULA.	1876, 483 ²		
Species			
1. monogrammica	484 1881, 124	Temminck, Pl. Col. pl. 314. Ussher, Ibis, 1874, p. 46. J. H. G. P. Z. S. 1878, p. 791. Ayres, Ibis, 1879, p. 285. Sharpe's Layard, p. 42. Du Bocage, Orn. d'Angola, p. 33. Shelley, P.Z.S. 1881, p. 562.	13

¹ The peculiarities of coloration and marking which Mr. Blanford observed in his Abyssinian specimens (*vide* Geol. and Zool. of Abyssinia, p. 292), and which I formerly agreed with him in considering to be indicative of the specific validity of *M. niloticus* (Sund.), I now think are more probably in the nature of individual variations (perhaps contingent upon age) than in that of specific distinctions of a constant and stable character. Levaillant figures a South-African specimen under the name of "Le Gabar."

² In my Notes I have treated the genus as most nearly allied to *Asturina*; but I am now of opinion that it is even more closely related to *Melierax*. See my remarks in P. Z. S. 1878, p. 791; *conf.* Garrod, P. Z. S. 1873, pp. 466, 634.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages)	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 6. ASTUR.	1875 , 353		
Species 1. palumbarius (Linn.), p. 95.	,, 353 354	Newton's Yarrell, vol. i. p. 83. Irby, Orn. of Gibraltar, p. 36. Hume, Nests and Eggs of Indian Birds, p. 24. Radcliffe, Falconry, p. 16. Dresser, Birds of Europe, vol. v. p. 587, pl. 354. David et Oustalet, Ois. de la Chine, p. 23. Biddulph, Ibis, 1881, p. 40. Seeböhm, British Birds, vol. i. p. 142.	15 Skel. 2
2. candidissimus Dybowski.	.....	Pallas, Zoogr. Rosso-As. vol. i. p. 370 ¹ . Dybowski, Bull. Soc. Zool. de France, 1883, p. 353.	
3. atricapillus (Wils.). pp. 97, 456.	,, 353 to 355	Swainson and Richardson, Fauna Bor.-Amer. pt. 1, p. 40, pl. 26. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 237. Seeböhm, British Birds, vol. i. p. 145.	7²
4. hensti* , Schleg., p. 97	,, 353	Milne-Edwards et Grandier, Ois. de Madagascar, vol. i. p. 98, vol. ii. pls. 30 & 30 a.	○

¹ Here described under the designation of "*Accipiter astur* β."

² One of these specimens is an immature example of the subspecies "*striatulus*" of Ridgway, if that be admitted as distinct, but I do not believe it to be a valid subspecies.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 7. LOPHOSPIZIAS ¹ .	1875 , 355		
Species			
1. trivirgatus (<i>Temm.</i>) p. 105.	,, 355 356 468	Schlegel, Valk Vogels, pp. 18, 57, pl. 10. Legge, Birds of Ceylon, p. 20.	10
Subspecies	.		
a. rufitinctus ² (<i>M' Clell.</i>), p. 106.	,, 355	Leggo, Birds of Ceylon, p. 21.	5
Species			
2. griseiceps (<i>Schleg.</i>) p. 106.	,, 355	Wallace, Ibis, 1864, p. 184, pl. 5.	3
Schlegel, Valk Vogels, pp. 19, 58, pl. 11. figs. 1 & 2.			
3. tenuirostris ?* ³ ... (<i>Brügg.</i>).	.....	Brüggemann, in Abhandlungen vorn nat. Vereine zu Bremen, vol. v. p. 43, pl. 3. fig. 2 (head only).	0
Genus 8. NISOIDES .	1875 , 366		
Species			
1. moreli *, <i>Poll.</i> , p. 129	1869 , 448 1875 , 366	Milne-Edwards et Granddier, Ois. do Madagascar, vol. i. p. 105, vol. ii. pl. 32. fig. 2, pl. 32 a.	0

¹ Included by Mr. Sharpe in the genus *Astur*, as also by many other authors.

² "Astur indicus," Hodggs., appears to be a later synonym than *rufitinctus* (*vide* 'Stray Feathers,' vol. v. p. 124).

³ Apparently founded on a single specimen from the Celebes, which was considered by Kaup to be a young male of *L. griseiceps*; it has the peculiarity (perhaps only an individual one) of the absence of any sinuation from the tomia of the upper mandible.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 9. SCELOSPIZIAS ¹ .	1875 , 357		
Species			
1. francesi (<i>Smith</i>) ² . . . p. 116.	,, 357 to 359	Milne-Edwards et Granddier, Ois. de Madagascar, vol. i. p. 99, vol. ii. pls. 31, 32. fig. 1, pls. 33 & 34.	6
2. pusillus , <i>Gurn.</i>	,, 358 359	Selator, Ibis, 1864, p. 298, pl. 7 ³ . E. Newton, P. Z. S. 1877, p. 296 ⁴ . Shelley, P.Z.S. 1879, p. 674.	4
3. brutus (<i>Poll.</i>), p. 107. 1869 , 448 ⁵ 1875 , 359		Schlegel and Pollen, Faun. Madag. Ois. p. 38, pl. 12. fig. 2 ⁵ .	1
4. polyzonoides (<i>Smith</i>), p. 113.	,, 360 468	Smith, Ill. of S. African Zool., Aves, pl. 11. Sharpe's Layard, p. 22. Du Boeage, Orn. d'Angola, p. 19. Shelley, P.Z.S. 1881, p. 563. Shelley and Ayres, Ibis, 1882, p. 237.	13
5. badius (<i>Gmel.</i>) p. 109.	,, 360 361	Temminck, Pl. Col. pls. 308, & 336 ⁶ . Hume, Nests and Eggs of Indian Birds, p. 24 ⁷ . Blanford, Zool. and Geol. of Eastern Persia, p. 107. Legge, Birds of Ceylon, p. 23. Davidson, Stray Feathers, vol. x. p. 286.	22

¹ Included by Mr. Sharpe in the genus *Astur*; also by most other authors here referred to.

² In my Notes I have followed Mr. Sharpe in spelling this name as "franciscæ"; but I now look upon the spelling adopted above as more correctly representing the derivation of the name.

⁴ Here referred to the genus *Accipiter*.

⁶ Here figured under the name "Falco dussumieri."

⁷ Here referred to the genus *Micronisus*.

³ Here referred to the genus *Accipiter*.

⁵ Here referred to the genus *Nisus*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subspecies <i>a. poliopsis</i> (Hume) p. 110.	1875 , 360 361 1882 , 235	David et Oustalet, Ois. de la Chine, p. 24. Bingham, Stray Feathers, vol. ix. p. 143.	5
<i>b. cenchroides</i> (Severtz.).	1875 , 361 479 480 (with editorial foot-note).	Severtzoff, Turk. Jev. p. 113. Severtzoff, Ibis, 1875, p. 104. Severtzoff, Stray Feathers, vol. iii. p. 422. Blanford, Zool. and Geol. of Eastern Persia, p. 108. Biddulph, Ibis, 1881, p. 40 ¹ .	0
<i>c. sphenurus</i> (Rüpp.), . . . p. 112.	1875 , 360	Rüppell, System. Uebersicht, pp. 6 & 11, pl. 2 ² .	13 Skel. 1
Species <i>6. brevipes</i> ³ (Severtz.), . . . p. 111.	,, 360 361	Dresser, Birds of Europe, vol. v. p. 633, pls. 359 & 360 ⁴ . Severtzoff, Ibis, 1875, p. 105.	12
<i>7. tachiro</i> (Daud.) . . . p. 99.	1868 , 144 1875 , 361	Temminek, Pl. Col. pls. 377 & 420 ⁵ . 362 Sharpe's Layard, p. 20. 468 Du Bocage, Orn. d'Angola, p. 17.	14 Skel. 1
Subspecies <i>a. unduliventer</i> ⁶ . . . (Rüpp.), pp. 99, 100, 108.	,, 362 363	Shelley, P.Z.S. 1882, p. 302. Rüppell, Neue Wirb. p. 40, pl. 18. fig. 1.	4

¹ Hero referred to the genus *Micronisus*.² Hero referred to the genus *Nisus*.³ Misprinted "brevicaps" in the 'Ibis' for 1875, p. 361.⁴ Hero referred to the genus *Accipiter*.⁵ Hero figured as "Falco tachiro."⁶ I now consider that the following are all synonyms of *S. unduliventer*, viz. *Astur macroscelides* of Hartlaub, *Accipiter zonarius* of Hartlaub, and *Astur tibialis* of Verreaux; also that Captain Shelley's immature specimen from the Cameroons, referred to by me in the 'Ibis,' 1875, p. 362, belongs to this species: the type of *Astur tibialis* is one of the four specimens of *S. unduliventer* preserved in the Norwich Museum.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
SCELOSPIZIAS.			
Subspecies			
<i>b. castanilius</i> (Bon.), pp. 80, 101, pl. 3 ¹ .	1875, 363 364	Selater and Salvin, Exotic Orn. p. 35, pl. 18 ² .	○
Species	,, 364	Sharpe et Bouvier, Bull. S. Z. de la France, vol. ii. p. 470.	○
8. <i>toussenelii</i> (Verr.), p. 101, pl. 6. fig. 1.			
Genus 10.			
ERYTHROSPIZIAS.	,, 364		
Species			
1. <i>trinotatus</i> ³ (Bon.) . . p. 101.	,, 364	Schlegel, Valk Vogels, pp. 27, 65, pl. 19. figs. 1, 2, & 3 ³ .	6
Genus 11.			
TACHYSPIZIAS ⁴ .	,, 365		
Species			
1. <i>soloensis</i> (Lath.) . . p. 114, pl. 4. fig. 1.	,, 365 366	David et Oustalet, Ois. de la Chine, p. 25.	17
		Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 65.	
		Bingham, Stray Feathers, vol. ix. p. 143.	
Subspecies			
<i>a. cuculoides</i> ? (Temm.) p. 115, pl. 4. fig. 2.	,, 365 366	David et Oustalet, Ois. de la Chine, p. 24.	2
		Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 66.	

¹ This plate is inscribed "Astur macroscelides," and so referred to by Mr. Sharpe at p. 100.

² Here figured and described as "Accipiter castanilius," as to which see my Notes above referred to.

³ This species is referred by Mr. Sharpe to the genus *Astur*, and by Prof. Schlegel to *Nisus*.

⁴ Mr. Sharpe and also MM. David and Oustalet and Captain Bingham merge this genus in that of *Astur*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwiche Museum.
Genus 12. LEUCOSPIZIAS ¹ .	1875 , 365		
Species			
1. novæ-hollandiæ .. (<i>Gmel.</i>), p. 118.	,, 365	Gould, Birds of Australia, vol. i. pl. 15 ² .	3
2. leucosomus (<i>Sharpe</i>) p. 119.	,, 365	Schlegel, Valk Vogels, pp. 19, 58, pl. 11. fig. 3 ² . Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 42.	1
3. cinereus (<i>Vieill.</i>) .. p. 117.	,, 365	Gould, Birds of Australia, vol. i. pl. 14 ² .	6
4. poliocephalus (<i>Gray</i>), p. 117.	,, 365 1876 , 243	Selater, Ibis, 1860, p. 322, pl. 10 (adult). Sharpe on Collections of Dr. Meyer, p. 351. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 45, and pt. 3, p. 508. Salvadori, Voyage of the 'Challenger,' Birds, p. 74.	3
Genus 13. UROSPIZIAS ¹ .	1875 , 364 365		
Species			
1. haplochrous (<i>Sclat.</i>) p. 119.	,, 365 1876 , 243	Selater, Ibis, 1859, p. 275, pl. 8. E. L. and E. L. C. Layard, Ibis, 1882, p. 498.	8
2. albigularis (<i>Gray</i>) .. p. 120.	1875 , 365	Gray, Cruiso of the Curaçoa, p. 354, pl. 1 (adult).	6 ⁴

¹ Included by Mr. Sharpe in the genus *Astur*.

² Here figured under the title of "*Astur novæ hollandiae*."

³ In my Notes I have referred "*Accipiter poliocephalus*" of Gray to the genus *Urospizias*, but I now think that it belongs rather to *Leucospizias*.

⁴ One of these specimens is that figured in the 'Ibis' for 1881, the remaining five are from the island of Ugi in the Solomon Group, and have been recently obtained by the

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
UROSPIZIAS.			
2. <i>albigularis</i> (continued).	1881 , 259 to 261 pl. 8 (immature). 1882 , 179 180	Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 44, and pt. 3, p. 507. Ramsay, Proc. Linn. Soc. N. S. Wales, vol. vi. pp. 15, 718, 727. Ramsay, Ibis, 1882, p. 345.	
3. <i>meyerianus</i> *..... (Sharpe).	1881 , 261	Sharpe, Journ. of Linn. Soc. (Zool.) vol. xiii. p. 458, pl. 22. Sharpe on Collections of Dr. Meyer, p. 354.	○

Norwich Museum, through the good offices of Mr. E. P. Ramsay; they have none of them been sexed by the collector, but are all larger than the two immature males from the neighbouring island of San Christoval, of which I have given the dimensions in the 'Ibis' for 1881, p. 261, and for 1882, p. 180. The five Ugi specimens measure as under:—

	Wing.	Tarsus.	Middle toe s. u.
	inches.	inches.	inch.
Immature, with some down still attached ...	8·75	2·45	1·60
Ditto, with no down remaining	9·40	2·35	1·60
White-breasted adult	10·0	2·55	1·60
Ditto, ditto.....	10·0	2·50	1·60
Melanistic adult.....	9·80	2·50	1·70

The last-named specimen is an example of the black hawk for which Mr. Ramsay, in the first instance, proposed the specific name "versicolor," but which he subsequently considered not to be separable from *U. albicularis*. I concur in the latter view, and think it probable that it is a melanistic phase, possibly hereditary, of the white-breasted bird; such melanisms, as is well known, occur in other raptorial birds, of which I may mention two very similar instances on the African continent, *Accipiter melanoleucus* and *Buteo augur*. The specimen now referred to is a slate black on the exposed portions of the feathers, but the basal moieties of the primaries are white on the inner webs, cross-barred and freckled with dark slate-colour, and the under surface of the tail is indistinctly crossed with dark brown bars on a ground of somewhat lighter brown; in both these particulars it resembles the white-breasted adults, except that in these the barring on the under surface of the rectrices is less indistinct. The two immature specimens are evidently younger than that figured in the 'Ibis' for 1881; they resemble it on the upper surface, but differ in having a blackish-brown shaft-mark on each feather of the throat, and in the ground-colour being of a much darker and richer rufous on all the underparts, including the wing-linings, and in all these parts being broadly and regularly cross-barred with blackish brown.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
4. pulchellus [*] (<i>Rams.</i>)	.....	Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 44 ¹ . Ramsay, Proc. Linn. Soc. of N. S. Wales, vol. iv. p. 66 ² , vol. vii. p. 17. Ramsay, Journ. of Linn. Soc. (Zool.) vol. xvi. p. 131. Ramsay, Ibis, 1882, p. 473.	○
5. etorques ³ , <i>Salv.</i>	1882, 453 454	Salvadori, Ann. Mus. Civ. Gen. vol. vii. p. 901. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 49, and pt. 3, p. 508.	2
6. dampieri ³ , <i>Gurn.</i>	" 126 ⁴ " 453 " 454	Scalater, P.Z.S. 1877, p. 109 ⁴ , 1879, p. 447 ⁴ . Layard, Ibis, 1880, p. 294 ⁴ . Finsch, Ibis, 1881, p. 535. Salvadori, Orn. della Papuasia e delle Molucche, pt. 3, p. 509.	2
7. misoriensis ³ , <i>Salv.</i> . . . .	.....	Salvadori, Ann. Mus. Civ. Gen. vol. vii. p. 904. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 49. Sharpe on Collections of Dr. Meyer, p. 353.	1

¹ There included amongst the synonyms of *U. albicularis*.

² There described under the name "Astur soloensis."

³ See Appendix C.

⁴ The specific name "etorques" is here used.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
UROSPIZIAS.			
Species			
8. pallidiceps* , Salv. p. 128 ¹.	.....	Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 64. Salvadori, Ibis, 1879, p. 473. Salvadori, Prodromus, Ad-ditamenta, p. 2.	○
9. hiogaster (Müll. & Schleg.), p. 104.	1875, 365	Schlegel, Valk Vogels, pp. 27, 65, pl. 18 ² . Salvadori, Voyage of 'Challenger,' Birds, p. 61. Salvadori, Orn. della Papuasia e dello Molucche, pt. 1, p. 47.	6
10. henicogrammus ³ (Gray), pp. 102, 124.	,, 365	Schlegel, Valk Vogels, pl. 14. figs. 1, 3, & 4 ⁴ . Sharpe on Collections of Dr. Meyer, pp. 353, 355. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 54.	4
11. griseigularis ⁴ (Gray), pp. 122, 124.	,, 365 468	Schlegel, Valk Vogels, pl. 16. fig. 1 ⁴ . Sharpe on Collections of Dr. Meyer, p. 352. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 57.	8
12. sharpii* (Oust.) ⁵ ..	.....	Oustalet, Bull. de la Soc. Philom. de Paris, 6th series, vol. ii. p. 25 ⁶ . Salvadori, Ibis, 1881, p. 607.	○

¹ There described as "Astur wallacii, young female (Bouru)."

² There referred to the genus *Nisus*.

³ "Astur muelleri" of Wallace is a synonym of *Urospizias henicogrammus*; in my Notes I erroneously referred to them as distinct species.

⁴ "Accipiter equatorialis" of Wallace is a synonym of *Urospizias griseogularis*. Schlegel figures this species and the next under the name of "Nisus cruentus."

⁵ Nec Ramsay.

⁶ Here referred to the genus *Astur*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
13. rufitorques (Peale) p. 121.	1875 , 365 1876 , 384	Cassin, U. S. Exploring Expedition, Ornith., ed. 1858, p. 90, pl. 2 ¹ . Finsch, Voyage of the 'Challenger,' Birds, p. 40 ¹ .	8
14. melanochlamys * . <i>Salv.</i>	.....	Salvadori, Ann. Mus. Civ. Gen. vol. vii. p. 905, vol. xii. p. 38. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 63.	0
15. wallacii (Sharpe) . p. 128, pl. 5.	1875 , 365	.....	1²
16. sylvestris (Wall.) p. 104.	,, 365 1881 , 265 (footnote) 266 267	Schlegel, Valk Vogels, pl. 17. fig. 5 (immature) ³ . Salvadori, Ibis, 1881, p. 607.	2
17. torquatus ⁴ (Temm.) p. 125.	1875 , 365 1881 , 263 to 266	Schlegel, Valk Vogels, pp. 25, 63, pl. 17. figs. 1, 2, 3, & 4. Ramsay, Proc. of Linn. Soc. N. S. Wales, vol. iii. pp. 173, 248. Salvadori, Ibis, 1879, p. 319 ⁵ ; 1881, p. 606 ⁵ .	5
		Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 60.	

¹ Referred by Cassin to the genus *Accipiter*, and by Finsch to *Astur*.

² This is an immature specimen brought from Lombok by Mr. Wallace, and marked by him as a female; it measures, wing 10·20 inches, tarsus 2·50, middle toe s. u. 1·60, and closely resembles in plumage the young male from Lombok described in Mr. Sharpe's Cat. p. 128, footnote. "1·35" there given as the length of the tarsus in that specimen is probably a misprint for "2·35."

³ Here figured as "*Nisus torquatus*."

⁴ "*Astur sharpii*" of Ramsay (*nec Oustalet*) is probably not specifically distinct from *Urospizias torquatus*; but a further comparison of specimens is desirable.

⁵ Count Salvadori here refers to a specimen brought by Péron from Western Aus-

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Muscum.
UROSPIZIAS.			
Species			
18. approximans (<i>Vig. et Horsf.</i>), pp. 126 & 127 ¹ .	1875 , 365 468 1881 , 261 to 263	Gould, Birds of Australia, vol. i. pl. 17 ¹ . E. L. and E. L. C. Layard, Ibis, 1882, p. 499 ² .	23
Genus 14.			
ACCIPITER.			
Species			
1. cirrhocephalus ... (<i>Vieill.</i>), p. 141.	1875 , 468 475	Gould, Birds of Australia, vol. i. pl. 19 ³ . Sharpe on Collections of Dr. Meyer, p. 354.	10⁴
		Salvadori, Orn. della Papu- asia e delle Molucche, pt. 1, p. 67.	
2. erythrauchen , Gray p. 145.	,, 468 475	Schlegel, Valk Vogels, pl. 13. figs. 1, 3, & 4 ⁵ . Salvadori, Orn. della Papu- asia e delle Molucche, pt. 1, p. 68.	2
3. rubricollis , Wall... p. 144.	,, 475 1882 , 128	Wallace, P.Z.S. 1863, p. 21, pl. 4. Salvadori, Orn. della Papu- asia e delle Molucche, pt. 1, p. 69, and pt. 3, p. 509.	2

tralia and preserved in the Paris Muscum; I know of no other authentic record of the occurrence of this species in Australia, unless it was a bird of this species on which Mr. Gould founded his "*Astur cruentus*."

¹ Mr. Gould refers this species to the genus *Astur*. I now consider his "*Astur cruentus*" to be a synonym of *Urospizias approximans*, or possibly, though less probably, of *U. torquatus*.

² Messrs. Layard, in this article, express their opinion that the race of *U. approximans* inhabiting the Loyalty Islands is subspecifically distinct; additional specimens are desirable before this point can be satisfactorily decided.

³ There figured as "*Accipiter torquatus*."

⁴ One of these specimens is from South-eastern New Guinea.

⁵ Professor Schlegel, here and elsewhere, uses the generic term "*Nisus*" in preference to that of "*Accipiter*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
4. <i>rhodogaster</i> (Schleg.), p. 145.	1863, 450 1875, 471 484 1882, 452 453	Ramsay, Proe. Linn. Soc. N. S. Wales, vol. iv. pp. 465, 492 ¹ . Schlegel, Valk Vogels, pp. 21, 60, pl. 12. figs. 5 & 6. Walden, Trans. Zool. Soe. vol. viii. p. 109, pl. 11 (immature) ² .	3
Subspecies			
a. <i>sulaensis</i> * (Schleg.). p. 146.	1875, 484	Schlegel, Valk Vogels, pp. 26, 64, pl. 16. figs. 3 & 4.	O
Species			
5. <i>virgatus</i> ³ (Temm.). p. 150.	,, 468 471 480 to 482	Temminck, Pl. Col. pl. 109 ⁴ . Sharpe, Stray Feathers, vol. viii. p. 440. J. H. G. Stray Feathers, vol. viii. p. 444.	15
Subspecies		Hume, Stray Feathers, vol. ix. p. 231.	
a. <i>affinis</i> ⁵ , Hodgs. p. 151 ⁶ .	,, 481 ⁸ 482 ⁹	Catalogue of Nepalese Birds collected by B. H. Hodgson, Zool. Miseellany, June 1844, p. 81.	5
		Sharpe, Stray Feathers, vol. viii. p. 440 ⁷ .	
		J. H. G. Stray Feathers, vol. viii. p. 443 ⁹ .	
		Hume, Stray Feathers, vol. ix. p. 231 ⁹ .	

¹ The species for which Mr. Ramsay has here proposcd the name of "*Astur brachyurus*" appears to me, from his description, to be identical with *Accipiter rubricollis*. Conf. Salvadori's article in part 3 of his 'Orn. Papuasia' above referred to, and entitled "Sp. 973. *Accipiter*(?) *brachyurus* (Ramsay)."

² This species is referred to by Lord Tweeddale as "*Teraspiza rhodogaster*."

³ See Appendix O.

⁴ Here figured as "*Falco virgatus*."

⁵ As to a specimen here mentioned, which I erroneously referred to *Accipiter rhodogaster*, see my correction of that error in the 'Ibis,' 1876, p. 278.

⁶ As to this subspecies, see Appendix O.

⁷ Included by Mr. Sharpe amongst the synonyms of *Accipiter virgatus*.

⁸ Some of the specimens which I here referred to *Accipiter virgatus* and to *Accipiter gularis* I now identify with *Accipiter affinis*, as to which see Appendix O.

⁹ Here referred to *Accipiter gularis*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
ACCIPITER.			
Subspecies			
b. manillensis (Meyen), p. 151 ¹.	.....	Meyen, Beitr. p. 694, pl. 9 ² .	O
Species			
6. nisoides , Blyth p. 151 ¹ .	1863, 447 pl. 11 ⁴	Blyth, Journ. As. Soc. of Bengal, vol. xvi. p. 727.	20
	1875, 481 ⁵ 482	Blyth, Ibis, 1865, p. 28 : 1866, p. 240 (footnote) : to 484 ⁶	
	1880, 217 ⁶	1870, p. 158. Temminck & Schlegel, Faun. Japon., Aves, p. 5, pl. 2 ⁷ .	
		Swinhoe, Ibis, 1874, p. 430 ⁶ . Tweeddale, P. Z. S. 1878, p. 938 ⁶ .	
		Sharpe, Stray Feathers, vol. viii. p. 442 ⁶ .	
7. hartlaubi (Verr.) p. 150, pl. 6. fig. 2.	1875, 471 to 473	Dubois, Revue et Mag. de Zoologie, 1874, p. 1, pl. 4.	3 ⁸
8. minullus (Daud.) p. 140.	1868, 144 1875, 471 to 473	Levaillant, Ois. d'Afrique, p. 140, pl. 34 ⁹ .	17
Subspecies			
a. erythropus (Hartl.), p. 141.	,, 471 472	Andersson, Birds of Damara Land, p. 31. Sharpe's Layard, p. 23. Du Boceage, Orn. d'Angola, p. 20. Shelley, P.Z.S. 1882, p. 305.	
		Sehlegel, Notes from the Leyden Museum, vol. iii. p. 57.	O

¹ Included by Mr. Sharpe amongst the synonyms of *Accipiter virgatus*, as to which and as to this subspecies generally, see Appendix O.

² Here referred to the genus *Nisus*.

³ Here figured under the name of "*Accipiter stevensoni*."

⁴ Here described and figured under the name of "*Accipiter stevensoni*," the type of which is preserved in the Norwich Museum.

⁵ Here referred to "*Accipiter gularis*." ⁶ Here referred to "*Accipiter stevensoni*."

⁷ Here described and figured under the name of "*Astur (Nisus) gularis*."

⁸ One of these specimens is the type.

⁹ Levaillant here figures this Hawk, in the immature plumage, under the name of "Le Minule."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Species 9. subniger (<i>Vieill.</i>) ¹ . . . p. 139.	1875, 471 472	Gray's Genera, vol. i. p. 29, pl. 10. Ridgway, Studies of American Falconidæ, p. 125 ¹ .	8
10. collaris (<i>Kaup</i>) . . . p. 144.	,, 470 471	Slater, Ibis, 1860, p. 147, pl. 6. Salvin, Ibis, 1874, p. 321. Ridgway, Studies of American Falconidæ, p. 127.	1
11. ninus (<i>Linn.</i>), p. 132	,, 479	Newton's Yarrell, vol. i. p. 88. Irby, Orn. of Gibraltar, p. 36. J. H. Gurney, jun., Rambles of a Naturalist, p. 138. Scully, Stray Feathers, vol. iv. p. 122. Dresser, Birds of Europe, vol. v. p. 599, pls. 355, 356, 357, 358. Prjevalsky, Rowley's Orn. Misc. vol. ii. p. 153. Hume, Nests and Eggs of Indian Birds, p. 25. David et Oustalet, Ois. de la Chine, p. 27. Biddulph, Ibis, 1881, p. 41. Seeböhm's British Birds, vol. i. p. 135. Oates, Birds of British Bur- mah, vol. ii. p. 181.	56 Skel. 3

¹ Mr. Ridgway applies to this Hawk the specific name "superciliosus," but at the same time explains, very clearly, that neither the description given by Linnaeus of his "Falco superciliosus" nor that by Latham of his "Falco tinus" (the name used by Mr. Sharpe) agrees accurately with the present species, and that it is therefore safest to have recourse to Vieillot's specific name "subniger," which I have here adopted.

Mr. Ridgway refers this and the succeeding species to the "subgenus *Hieraspizias*;" but all others which I have included in *Accipiter* and *Cooperastur* he comprises under the generic term "*Nisus*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
ACCIPIITER.			
Subspecies			
<i>a. melanochistus</i> ... Hume, p. 132, footnote	1875 , 479	Hume, Ibis, 1869, p. 356. Hume, Nests and Eggs of Indian Birds, p. 26. Biddulph, Ibis, 1881, p. 41; 1882, p. 269.	2
Species	,, 468 (footnote)	Milne-Edwards et Grandier, Ois. de Madagascar, vol. i. p. 106, vol. ii. pls. 35 & 36.	1
<i>12. madagascariensis</i> , Verr., p. 143.	484		
<i>13. ovampensis</i> ¹ , Gurn.	,, 366 to 370 pl. 6 468 478	.....	3
<i>14. fuscus</i> (Gmel.) p. 135.	,, 470 475	Audubon, Birds of America, pl. 374. Grayson, Memoirs Boston Soc. Nat. Hist. vol. ii. p. 298. Ridgway, Studies of American Falconidæ, pp. 94, 110.	31 Skel. 1
<i>15. fringilloides</i> * Vig., p. 135 (footnote).	.....	Ridgway, Studies of American Falconidæ, pp. 95, 117.	0
<i>16. hawaii</i> *, Dole ....	.....	Dole, Hawaiian Annual, 1879, p. 43. Dole, Ibis, 1880, p. 241.	0
<i>17. chionogaster</i> (Kaup), p. 148.	1875 , 476	Selater and Salvin, Exotic Orn. p. 27, pl. 14. Ridgway, Studies of American Falconidæ, pp. 95, 122.	5

¹ Since this species was described from specimens obtained in Ovampo Land, the British Museum has acquired one from the Zambesi; and I have seen another, in private hands, which was believed to have been brought from Natal.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
18. erythrocemis ... <i>Gray</i> , p. 147.	1875, 476 477	Slater and Salvin, Exotic Orn. p. 33, pl. 17. Ridgway, Studies of American Falconidæ, pp. 95, 118.	2
19. salvini (<i>Ridg.</i>) ....	.....	Ridgway, Studies of American Falconidæ, pp. 95, 121.	0
20. ventralis , <i>Sclat.</i> ... p. 149.	1875, 477 478	Slater and Salvin, Exotic Orn. p. 25, pl. 13. Salvin, Ibis, 1874, p. 325. Ridgway, Studies of American Falconidæ, pp. 95, 120.	13
21. nigroplumbeus ¹ *? ... <i>Lawr.</i> , p. 149.	,, 478	Lawrence, Ann. Lyc. N. York, vol. ix. p. 270. Salvin, Ibis, 1874, p. 325. Ridgway, Studies of American Falconidæ, pp. 95, 122.	0
22. rufiventris , <i>Smith</i> , p. 148.	,, 478 479	Smith, Ill. of Zoology of S. Africa, Aves, pl. 93. Sharpe's Layard, p. 22.	11
23. melanoleucus <i>Smith</i> , p. 156.	,, 473 474	Smith, Ill. of Zoology of S. Africa, Aves, pl. 18. Ayres, Ibis, 1859, p. 241; 1861, p. 135. Sharpe's Layard, p. 25.	11
Subgenus A. COOPERASTUR ² .			
Species			
1. pileatus (<i>Temm.</i>) ... p. 153.	,, 469	Temminck, Pl. Col. pl. 205. Slater and Salvin, Exotic Orn. p. 170 ² .	6

¹ Referred by Mr. Sharpe to *Accipiter ventralis*.

² Neither Mr. Sharpe nor the authors of 'Exotic Ornithology' admit the subgenus *Cooperastur* as distinct from *Accipiter*; Temminck merges both in *Falco*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
COOPERASTUR. Species			
2. bicolor (<i>Vieill.</i>) p. 154.	1875 , 469	Selater and Salvin, <i>Exotic Orn.</i> pp. 137, 170, pl. 69.	10
3. poliogaster (<i>Temm.</i>) ¹ p. 120.	1881 , 357 258 259	Temminck, <i>Pl. Col. pl.</i> 264. Bonaparte, <i>Rev. et Mag. de Zool.</i> 1854, p. 538.	0
4. cooperi (<i>Bon.</i>), p. 137	1875 , 469 470	Audubon, <i>Birds of America</i> , pls. 36 & 141. fig. 3 ² . Selater and Salvin, <i>Exotic Orn.</i> p. 170.	14
		Grayson, <i>Memoirs Boston Nat. Hist. Soc.</i> vol. ii. p. 298.	
		Ridgway, <i>Proc. Acad. Philadelphia</i> , 1875, p. 78.	
5. gundlachii * (<i>Lawr.</i>), p. 137 (footnote).	,, 469	Selater and Salvin, <i>Exotic Orn.</i> p. 170.	0
		Ridgway, <i>Proc. Acad. Philadelphia</i> , 1875, p. 86.	
		Ridgway, <i>Studies of American Falconidæ</i> , p. 104.	
6. guttatus (<i>Vieill.</i>) . . . p. 152.	,, 469	Selater and Salvin, <i>Exotic Orn.</i> pp. 169, 170, pl. 85.	1³
7. chilensis (<i>Phil.</i>) . . . p. 155.	,, 469	Selater and Salvin, <i>Exotic Orn.</i> pp. 73, 170, pl. 37.	5
8. pectoralis , <i>Bon.</i> ⁴ . . . p. 121 ¹ .	,, 356 357 469 1881 , 259	Selater, <i>Ibis</i> , 1861, p. 313, pl. 10. V. Pelzeln, <i>Ibis</i> , 1862, p. 194. Selater and Salvin, <i>Exotic Orn.</i> p. 170. Salvin, <i>Ibis</i> , 1874, p. 321.	1

¹ Referred by Mr. Sharpe to the genus *Astur*.

² Figured by Audubon as "*Falco stanleyii*".

³ The original of the figure in 'Exotic Ornithology.'

⁴ The type specimen which, when it was described by Bonaparte, was in the Museum at Antwerp was subsequently removed to that of Brussels.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 15. ERYTHROTRIORCHIS.			
Species 1. radiatus (<i>Lath.</i>) .. p. 159 ¹ .	1875, 364 1876, 65 66	Gould, Birds of Australia, vol. i. pl. 16 ² . Sharpe, P. Z. S. 1875, p. 337.	2
Genus 16. MEGATRIORCHIS.			○
Species 1. doriæ , <i>Salv.</i> & <i>d'Alb.</i>	1877, 435 to 437 1878, 87 ³	Salvadori et D'Albertis, Ann. Mus. Civ. Gen. vol. vii. p. 85. Salvadori, Orn. della Papu- asia e delle Molucche, pt. 1, p. 41.	
Subfamily 8. THRASÄETINÆ.			
Genus 1. MORPHNUS.			
Species 1. guianensis (<i>Daud.</i>), p. 222.	1877, 435 1878, 86	Pr. Maximilian, Beiträge, vol. iii. p. 90 ⁴ . Lesson, Traité, p. 51, pl. 11. fig. 2 ⁴ . Ridgway, Studies of Amer- ican Falconidæ, p. 149.	2
2. tæniatus , <i>Gurn.</i> ..	1879, 173 to 176 pl. 3	.....	○

¹ Here referred by an accidental oversight to the genus *Urospizias*.

² Mr. Gould refers this species to the genus *Astur*.

³ A specimen of this fine Hawk has been recently acquired by the British Museum; judging from this example, it seems to me that *Megatriorchis* approaches most nearly to the Australian genus *Erythrotiorchis*.

⁴ Prince Maximilian applies to this species the title of "Falco guianensis;" Lesson that of "Morphnus cristatus."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 2. HARPYOPSIS.			
Species			
1. novæ-guineæ , Salv.	1877 , 435 436	Salvadori, Ann. Mus. Civ. Gen. vol. vii. p. 682.	1
	1878 , 87	Salvadori, Orn. della Papuasia o delle Molucche, pt. 1, p. 40, and pt. 3, p. 507.	
Sharpe on Collections of Dr. Meyer, p. 355, pl. 28. D'Albertis, New Guinea, vol. i. p. 278, fig.			
Genus 3. THRASAËTUS.			
Species			
1. harpyia (Linn.)	1877 , 434 435	Temminck, Pl. Col. pl. 14 ¹ . D'Orbigny, Voyage Ois. p. 81 ¹ .	4
p. 224.	1878 , 86 87	Tschudi, Fauna Peruana Orn. p. 96 ¹ . Ridgway, Studies of American Falconidæ, p. 145.	
Subfamily 9. AQUILINÆ ^a .			
Genus 1. SPIZAËTUS.	1877 , 423		
Species	434		
1. coronatus (Linn.) ..	1861 , 129 130	Smith, Ill. of Zoology of S. Africa, Aves, pls. 40 & Skel. 1	2
p. 266.		41 ³ .	1

¹ Temminck refers to this species under the name of "Falco destructor," D'Orbigny under that of "Harpyia destructor," and Tschudi under that of "Morphnus harpyia."

² In my Notes I have referred all the "Hawk-Eagles," both those with bare and those with feathered tarsi, to the subfamily *Thrasaëtinæ*, but I now think it more convenient to place all those genera in which the tarsus is wholly feathered in the subfamily *Aquilinæ*; the gradation from *Thrasaëtus* to *Aquila* is a very gradual one as regards all other characters.

³ Plate 40 represents the immature plumage, and plate 41 the adult, but both are incorrectly inscribed in this respect. Sir A. Smith refers this species to the genus *Aquila*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. tyrannus (Max.) . . . p. 264.	1868, 139 1877, 423 434	Ayres, Ibis, 1861 ¹ , p. 129 ; 1863, p. 331. Layard, Ibis, 1869, pp. 71, 362. Sharpe's Layard, p. 39. Du Bocage, Orn. d'Angola, p. 31.	5
3. ornatus (Daud.) . . . p. 262.	,, 423 434	Pr. Maximilian, Beiträge, vol. iii. p. 78 ² . Temminck, Pl. Col. pl. 73 ² . Léotaud, Ois. de la Trinidad, p. 12 ² . Sclater and Salvin, P. Z. S. 1873, p. 302.	5
Genus 2. LIMNAËTUS ³ . Species		Vieillot et Oudart, Gal. des Ois. pl. 21. Léotaud, Ois. de la Trinidad, p. 10. Lawrence and Sumichrast, Birds of S.W. Mexico, in Bull. U. S. Mus. no. 4, p. 38.	
1. nipalensis (Hodg.), p. 267.	,, 431 432	Hodgson, J. A. S. Bengal, vol. v. p. 229, pl. 7.	6 ⁴

¹ The monkey referred to in this note, as killed by a female *Spizaëtus coronatus*, was a specimen of *Cercopithècuss lalandii*.

² Described by Léotaud as *Spizaëtus braccata*. Prince Maximilian refers to this species and the next under the generic term of *Falco*, which Temminck also uses.

³ As to *Limnaëtus africanus* of Cassin, see my footnote to *Nisaëtus spilogaster*. In Mr. Sharpe's volume the genus *Limnaëtus* is merged in that of *Spizaëtus*, as it also has been by most of the authors whom I have quoted.

⁴ One of these specimens is that from Japan, referred to in the P. Z. S. 1880, p. 67, under the name "*Spizaëtus orientalis*," under which name this species is figured in the 'Fauna Japonica.' Hodgson figures it as "*Nisaëtus nipalensis*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
LIMNAETUS.			
1. nipalensis (<i>continued</i>).		Temminck and Schlegel, Fauna Japon. Aves, p. 7, pl. 3 ¹ . Radcliffe, Falconry, p. 32. Hume, Nests and Eggs of Indian Birds, p. 37. David et Oustalet, Ois. de la Chino, p. 11.	
Subspecies			
a. kelaarti (<i>Legge</i>) . . . . .	. . . . .	Legge, Ibis, 1878, p. 201.	2
		Legge, Birds of Ceylon, p.	
		51, pl. 2	
Species			
2. cirrhatus (<i>Gmel.</i>)	1877, 429	Vidal, Stray Feathers, vol.	
	p. 269.	430 ix. p. 30.	5
	1878, 86	Davidson, Stray Feathers,	
		vol. x. p. 288.	
3. ceylonensis (<i>Gmel.</i>),	1877, 430	Legge, Birds of Ceylon, p.	
	p. 269 ³ .	431 55, pl., and p. 1209.	5
	1878, 85	Hume, Stray Feathers, vol.	
	86	vii. p. 511 ⁴ .	
		Parker, Stray Feathers, vol.	
		ix. p. 476.	
4. philippensis	1877, 432	J. H. G. in Gould's Birds of	2
	(Gurn.), p. 261 (foot-	Asia, pt. 15.	
	note).	Walden, Tr. Z. S. vol. ix.	
		p. 141, pl. 24 ⁵ .	
		Walden, P. Z. S. 1878, p.	
		281.	

¹ See note 4 on p. 47.

² One of the specimens in the Norwich Museum is figured on this plate.

³ Mr. Sharpe gives *L. ceylonensis* as a synonym of *L. cirrhatus*, but they are, in my opinion, decidedly distinct.

⁴ In the article above referred to Mr. Hume discusses the probable identity of his *L. sphynx*, from Southern India, with *L. ceylonensis*. I have not seen the former, but, judging from Mr. Hume's description, I have no doubt that it is identical with *L. ceylonensis* (*conf.* Sharpe's Cat. p. 261, footnote).

⁵ The specimen here figured is one of those in the Norwich Museum.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
5. alboniger (Blyth) . . . p. 271.	1877 , 432	Gould, Birds of Asia, pt. 15, pl. ¹	3
6. caligatus (Raff.) . . . p. 272.	,, 424 to 429 1882 , 235	Temminck, Pl. Col. pl. 127. Cripps, Stray Feathers, vol. vii. p. 246. Sharpe, P. Z. S. 1879, p. 322. Kelham, Ibis, 1881, p. 366.	10 Skel. 1
7. horsfieldii ?, Vig. . . p. 272 ² .	1877 , 424 to 429	Horsfield, Zool. Researches in Java, pl. 36 ³ . Cripps, Stray Feathers, vol. vii. p. 246. Sharpe, P. Z. S. 1879, p. 322.	5
8. andamanensis . . . (Tytl.), p. 260 (footnote).	,, 429	Hume, Stray Feathers, vol. ii. p. 142, vol. iv. p. 280.	0
9. lanceolatus (Bon.) . . . p. 270.	,, 424	Schlegel, Valk Vogels, pl. 7. figs. 2 & 3 ⁴ . Twceddale, Collected Works, pp. 138, 208.	3
10. gurneyi (Gray) . . . p. 273.	,, 424	Schlegel, Valk Vogels, pp. 17, 56, pl. 9. Salvadori, Orn. della Papu- asia e delle Molucche, pt. 1, p. 3.	2⁵

¹ The specimens figured by Mr. Gould are two of those in the Norwich Museum.

² Mr. Sharpe treats *L. caligatus* and *L. horsfieldii* as one species under the name "Spizaëtus limnaëtus." Temminck employs for the former the name of "Falco niveus."

³ There figured under the name "Faleo limnaëtus."

⁴ Figured under the name "Spizaëtus cirrhatus."

⁵ One of these specimens is from S.E. New Guinea, the other from Batchian; the latter is the type specimen described and figured by the late Mr. G. R. Gray in the P. Z. S. for 1860, p. 342, pl. 169. Mr. Gray's article does not mention the Waigou specimen which Mr. Sharpe refers to as the type of this species.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 3.			
LOPHOTRIORCHIS¹. 1877, 424			
Species			
1. kieneri (<i>Sparr.</i>).... pp. 255, 458.	,,	424 St.-Hilaire in Rec. et Mag. 432 do Zool. 1845, pl. 35 ² . 433 Hume, Stray Feathers, vol. ix. p. 273. Legge, Birds of Ceylon, p. 43.	6
2. isidori (<i>Des Murs</i>) .. p. 256.	,,	424 Des Murs, Icon. Orn. pl. 433 1 ³ . 434 Dubois, Acad. Roy. de Belgique Bull. 2nd series, vol. xxxviii. no. 7, p. 1, pls. 1 & 2 ⁴ .	2
Genus 4.			
LOPHOAETUS.			
Species			
1. occipitalis (<i>Daud.</i>), p. 274.	,,	422 Levaillant, Ois. d'Afrique, 423 vol. i. p. 8, pl. 2 ⁴ . Ayres, Ibis, 1859, p. 238 ⁴ . Sharpe's Layard, p. 41. Du Bocage, Orn. d'Angola, p. 32.	5
Skel. 1			

¹ In my Notes I expressed a doubt as to the propriety of separating this genus from *Limnaetus*, but I now think that they may properly be separated, especially on the ground of the greater proportionate space between the tips of the secondaries and those of the primaries in *Lophotriorchis* as compared with *Limnaetus*. As to a supposed third species of this genus, see my footnote under the head of *Nisaetus spilogaster*.

² There figured under the name "*Astur kieneri*."

³ Des Murs figures this species under the name of "*Aquila isidori*;" Dubois under that of "*Spizaetus devillei*."

⁴ Le Vaillant designates this species "Le Huppard." In Mr. Ayres's note it is referred to the genus *Spizaetus*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 5. NEOPUS. Species 1. malayensis (<i>Tenm.</i>), 1877 , 423 p. 257.		Schlegel, Valk Vogels, pp. 8, 49, pl. 3. figs. 1, 2. Hume, Nests and Eggs of Indian Birds, p. 32. Legge, Birds of Ceylon, p. 47. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 6.	5
Genus 6. SPIZIASTUR. Species 1. melanoleucus (<i>Vieill.</i>), pp. 258, 458.	,, 422	Temminck, Pl. Col. pl. 79 ² . Slater and Salvin, P. Z. S. 1864, p. 369.	3
Genus 7. NISAËTUS. Species 1. bellicosus (<i>Daud.</i>) . . . p. 265 ³ . 2. fuscatus (<i>Vieill.</i>) . . . p. 250.	,, 419 1861, 129 1877, 421 422 ,, 419 420	Smith, Ill. of Zoology of S. Africa, Aves, pl. 42 ³ . Andersson, Birds of Damara Land, p. 8 ³ . Sharpe's Layard, p. 40 ³ . Radcliffe, Falconry, p. 31 ⁴ . Hume, Nests and Eggs of Indian Birds, p. 33 ⁴ .	3 6
			1

¹ Here referred to the genus *Aquila*.² This species is figured by Temminck under the name "*Falco atricapillus*."³ Mr. Sharpe includes *Nisaëtus bellicosus* in the genus *Spizaëtus*; by Sir A. Smith it is referred to *Aquila*; and by myself, in the 'Birds of Damara Land,' to *Pseudeetus*.⁴ Referred to by Col. Radcliffe as "*Eutolmaëtus bonelli*," and by Mr. Hume as "*Pseudeetus bonelli*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
NISAËTUS.			
2. fasciatus (<i>continued</i>).			
3. spilogaster (<i>Bon.</i>)	1862 , 149	Irby, Birds of Gibraltar, p. 40.	
	p. 252.	J. H. Gurney, jun., Rambles of a Naturalist, p. 131.	
		Dresser, Birds of Europe, vol. v. p. 575, pl. 351.	
		fig. 1, pls. 352, 353.	
			8
	1864 , 356 ¹	Müller, Ois. d'Afr. pl. 1 ¹ .	
	to 151	Selater, Ibis, 1864, p. 303 ¹ .	Skel. 1
	pl. 4 ¹	Andersson, Birds of Damara	
		Land, p. 7 ¹ .	
	1877 , 421	Sharpe's Layard, p. 38.	
	1878 , 84	Du Boeage, Orn. d'Angola,	
		p. 29.	
4. pennatus (<i>Gmel.</i>)	1877 , 419	Irby, Orn. of Gibraltar, p. 45.	12
	1882 , 455	Bureau, Assoc. Française pour l'Avancement des Sciences, vol. iv. pl. 13.	
		Ibis, 1877, p. 245 (editorial note on the above).	
		Dresser, Birds of Europe, vol. v. p. 481, pls. 336 &	
		337.	
		Sharpe's Layard, p. 37.	
		Seully, Ibis, 1881, p. 420.	

¹ Müller's figure is inscribed "Spizaëtus zonurus." The immature specimen figured under the incorrect appellation of "Spizaëtus ayresii" in the 'Ibis' for 1862 is one of those in the Norwich Museum; the type specimen of "Lophotriorchis lucani" of Sharpe and Bouvier, which is preserved in the British Museum, also seems to me to be a young *Nisaëtus spilogaster*, and apparently a male. *Limnaëtus africanus* of Cassin appears to me, from his description of the type specimen preserved in the Philadelphia Museum, to be founded on an old male of *Nisaëtus spilogaster*, with which the description given agrees very well, except that the length of the wing is quoted as 14 inches, whereas the usual wing-measurement in the male of *N. spilogaster* is about 16 inches; but, on the other hand, Mr. Layard, in the first edition of the 'Birds of South Africa,' p. 14, mentions a male in which the wing only measured 13 inches. I cannot agree with Sharpe's view (*vide* Cat. p. 260, footnote) that *Limnaëtus africanus* is founded on *Aquila wahlbergi*. In the 'Ibis' for 1864, *Nisaëtus spilogaster* was referred by Dr. Selater and myself to the genus *Spizaëtus*; in editing the 'Birds of Damara Land,' I referred it to *Pseudaëtus*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
5. morphnoides (<i>Gould</i>), p. 254.	1877, 419 420	Gould, Birds of Australia, vol. i. pl. 2 ¹ .	3
	1882, 454 455	Ramsay, P. Z. S. 1875, p. 578.	
		Sharpe, Journ. of Linn. Soc. Zool. vol. xvi. p. 424.	
		Salvadori, Orn. della Papuasia e delle Molucche, pt. 3, p. 504.	
Genus 8.			
AQUILA.			
Species			
1. chrysaëtus (<i>Linn.</i>) p. 235.	1866, 421 422	Audubon, Birds of America, pl. 181 ² .	12 ³
	1877, 210 to 215	Newton's Yarrell, vol. i. p. 11.	Skel. 1
		Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 314 ² .	
		Irby, Orn. of Gibraltar, p. 39.	
		Dresser, Birds of Europe, vol. v. p. 533, pl. 345.	
		Scully, Stray Feathers, vol. iv. p. 123.	
		David et Oustalet, Ois. de la Chine, p. 7.	
		Biddulph, Ibis, 1881, p. 41.	
		Seebohm, British Birds, p. 96.	

¹ Mr. Gould referred this species to the genus *Aquila*.

² Audubon uses for this species the name of "Falco chrysaëtos," and Messrs. Baird, Brewer, and Ridgway that of "Aquila chrysaëtus, var. *canadensis*."

³ One of these specimens is that killed at Skerne, near Driffield, in December 1861, and recorded in the 'Zoologist' for 1862, p. 7880; it was presented to the Norwich Museum by Mr. Francis Hoare. It is remarkable that this species should be so rare as it is in England, notwithstanding its not unfrequent occurrence in Scotland.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
AQUILA.			
Subspecies			
<i>a. barthelemyi</i> , <i>Jaub.</i> p. 236 ¹ .	1864 , 339 340 1877 , 211 215	Jaubert et Barthélémy-Lapommeraie, Richesses Orn. du Mid de la France, p. 34, pl. 2. Murie, P. Z. S. 1870, p. 80.	2
Species			
<i>2. verreauxi</i> , <i>Less.</i> . . . p. 234.	," 210	Des Murs in Lefebvre's Voy. en Abyssinie, p. 49, pl. 4. Andersson, Birds of Damara Land, p. 5. Sharpe's Layard, p. 33. Ayres, Ibis, 1879, p. 285.	4
<i>3. adalberti</i> , <i>Brehm</i> . . . p. 239.	1873 , 98 99 1877 , 216 ," 218 to 221	Irby, Orn. of Gibraltar, p. 39. Dresser, Birds of Europe, vol. v. p. 517, pls. 342, 343 (left figure).	5
<i>4. mogilnik</i> (<i>Gmel.</i>) . . . p. 238 ² .	1873 , 99 1877 , 215 to 218	Dresser, Birds of Europe, vol. v. p. 521, pl. 343 (right figure), pl. 344. Humo, Nests and Eggs of Indian Birds, p. 27. David et Oustalet, Ois. de la Chine, p. 8.	12 Skel. 1
<i>5. nipalensis</i> , <i>Hodg.</i> . . . p. 240 ² .	1873 , 422 423 1877 , 221 to 224	Gray and Hardwicke, Ill. of Ind. Zool. vol. i. pl. 17 ³ .	10

¹ Mr. Sharpe includes *A. barthelemyi* amongst the synonyms of *A. chrysaëtus*. I consider it a separable race, subspecifically distinct, but only distinguishable when in full plumage, in which state the remarkable white feathers at the junction of the body and the wings are an unmistakable peculiarity, and curiously similar to the corresponding feathers in *Nisaëtus pennatus*. M. David speaks of having seen in China Golden Eagles with white feathers "aux épaules," and Mr. Seebold of having heard of such an Eagle in Scotland (see the references to these authors under the head of *Aquila chrysaëtus*).

² Mr. Sharpe applies to this Eagle the specific name of "heliaca," and to *A. nipalensis* that of "mogilnik."

³ *A. nipalensis* is figured by Gray and Hardwicke under the specific name "bifasciata."

Nomenclature, with references to Sharpe's Cat. vol. i.	Referees to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subspecies a. <i>orientalis</i> ?, <i>Cab.</i> ... p. 241.	1873 , 422 423 1877 , 221 to 224	Alléon, Rev. et Mag. de Zool. 1866, p. 273, pl. 20 ¹ . Dresser, Birds of Europe, vol. v. p. 507, pl. 340 ² . Menzbier, Orn. Geography of Russia, pt. 1, pls. 5, 6, 7 (<i>vide</i> Ibis, 1883, p. 105).	7
<i>amurensis</i> ?, <i>Swin.</i> ³ p. 241.	.....	Swinhoe, P. Z. S. 1871, p. 338. Prjevalsky in Rowley's Orn. Misc. vol. ii. p. 144.	0
6. <i>rapax</i> (<i>Temm.</i>) ⁴ , ... p. 242.	1877 , 224 to 230 233 235	Ayres, Ibis, 1859, p. 238 ⁵ ; 1878, p. 281. Lilford, Ibis, 1865, p. 173, pl. 5 ⁵ . Andersson, Birds of Damara Land, p. 6 ⁵ .	6⁶ Skel. 1

¹ Here figured as "*Aquila mogilnik.*"² Figured by Mr. Dresser, from Volga specimens, under the name "*Aquila nipalensis.*"

³ Neither Mr. Sharpe nor Mr. Dresser have separated *A. orientalis* and *A. amurensis* from *A. nipalensis*; but I am disposed to think that they merit subspecific separation as distinguishable, though very closely allied, races. The first (very unfortunately named) is the Western form, which seems to constitute a decidedly smaller race than the more Eastern *A. nipalensis* of Northern India; the second is only represented (as regards the museums of Great Britain) by a single specimen from Amuria (the type), now in the possession of Mr. Seebohm, who acquired it as a part of the collection left by the late Mr. Swinhoe; it is larger than any Indian example that I have examined; but whether this excess of size is due to an individual peculiarity, or, as seems more probable, is characteristic of the Amurian race, can only be ascertained by the acquisition and comparison of additional specimens. If the Amurian race is distinct, it will probably be the same as the Mongolian, referred to by Col. Prjevalsky in the passage I have cited, under the name of "*Aquila bifasciata.*"

⁴ In September 1882 I saw, at the Zoological Society's Gardens in the Regent's Park, an adult *A. rapax*, said to have been obtained in Bulgaria, which was precisely similar to two African adults in the same cage.

⁵ The specific name "*næviodes*" is here used.

⁶ One of these specimens is that figured in immature plumage in the 'Ibis' for 1865, pl. 5, and is remarkable for having lived in confinement from 1864 to 1873 without assuming the adult dress; it was presented, when it died, by Lord Lilford to the Norwich Museum.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
AQUILA.			
6. rapax (<i>continued</i>) . .		Dresser, Birds of Europe, vol. v. p. 513, pl. 341. Taylor, Ibis, 1880, p. 143. Sharpe's Layard, p. 35. Du Bocage, Orn. d'Angola, p. 26.	
Subspecies			
<i>a. albicans</i> , Rüpp. p. 242 ¹ .	1877 , 224 to 226	Rüppell, Neue Wirbel. p. 34, pl. 13.	4
	230 to 236	Blanford, Geol. and Zool. of Abyssinia, p. 295 ¹ .	
Species			
7. vindhiana , Frankl. . . p. 243.	,, 225 234 to 236	Gray and Hardwicke, Ill. Ind. Zool. vol. i. pl. 16 ² . Hume, Nests and Eggs of Indian Birds, p. 29.	6
8. fulvescens , Gray . . p. 244 ³ .	,, 225 325 to 329	Gray and Hardwicke, Ill. Ind. Zool. vol. i. pl. 29.	1
9. clanga , Pall. ⁴ , p. 248	,, 329 to 333	Newton's Yarrell, vol. i. p. 20 ⁵ . Brooks, Stray Feathers, vol. iii. p. 312 ⁵ . Hume, Nests and Eggs of Indian Birds, p. 28 ⁵ . Dresser, Birds of Europe, vol. v. p. 499, pl. 339. Prjevalsky, Rowley's Orn. Mise. vol. ii. p. 145.	17

¹ Neither Mr. Sharpe nor Mr. Blanford separate *A. albicans* from *A. rapax*.

² Here figured under the name of *Aquila punctata*.

³ Mr. Sharpe does not separate this species from *A. vindhiana*, but I consider that it is unquestionably distinct.

⁴ See Appendix D.

⁵ The specific name "nævia" is here used.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subspecies <i>a. pomarina</i> ¹ , Brehm, p. 246.	1877, 329 to 331 333	Brooks, Stray Feathers, vol. iv. p. 269. Dresser, Birds of Europe, vol. v. p. 491, pl. 338.	9
Species 10. <i>hastata</i> (Less.) p. 248.	,, 329 331 333	Hume, Nests and Eggs of Indian Birds, p. 31. A. Anderson, P. Z. S. 1875, p. 23, pl. 3 ² . Brooks, Stray Feathers, vol. iv. p. 270.	5
11. <i>wahlbergi</i> , Sund. p. 245.	,, 333	J. H. G. Trans. Zool. Soc. vol. iv. p. 366, pl. 77 ³ . Sharpe's Layard, p. 36. Du Bocage, Orn. d'Angola, p. 28. Shelley and Ayres, Ibis, 1882, p. 238.	10 Skel. 1
Genus 9. UROAETUS.			
Species 1. <i>audax</i> (Lath.), p. 231	1860, 171 ⁴ 1862, 208 ⁴ 1877, 210	Gould, Birds of Australia, vol. i. pl. i. ⁵	4 Skel. 1

¹ Mr. Sharpe applies to this Eagle the specific name of "maculata"; in my Notes I used that of "rufonuchalis"; but Mr. Dresser's subsequent investigations, as detailed in his work on the 'Birds of Europe,' appear to me to prove that the correct specific name is "pomarina."

² The late Mr. A. Anderson wrote thus to me in June 1877:—"I think you will find that a constant peculiarity in *A. hastata* is the buff wing-lining, especially at the carpal joint, in all stages of plumage; every *A. hastata* (some thirty at least) that I have seen is buff under the wings."

³ There figured under the specific name "desmursii."

⁴ The specimen referred to in these Notes laid two eggs, in addition to those there mentioned, one on 26th February, the other on 3rd March 1865.

⁵ Here described under the name of "Aquila fucosa."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subfamily 10. <i>HALIAËTINÆ.</i>			
Genus 1. <i>THALASSAËTUS.</i>	1878, 452		
Species			
1. <i>pelagicus</i> (Pall.) . . . p. 306 ¹ .	,, 452	Temminck, Pl. Col. pl. 489 (adult) ² . Temminck and Schlegel, Fauna Japon. Aves, p. 11, pl. 4 (immature) ¹ . David et Oustalet, Ois. de la Chine, p. 13 ¹ .	3
Genus 2.			
<i>HALIAËTUS.</i>			
Species			
1. <i>albicilla</i> (Linn.) . . . p. 302.	1868, 129 130 ³	Newton's Yarrell, vol. i. p. 25.	19
	1878, 452 453	Dresser, Birds of Europe, vol. v. p. 551, pls. 347, 348. Prjevalsky, Rowley's Orn. Misc. vol. ii. p. 146. Seeböhm's British Birds, vol. i. p. 87.	Skel. 3
Subspecies			
a. <i>hypoleucus</i> ?* . . . Stejneger.	. . . . .	Ridgway, Proc. U. S. Nat. Mus. 1883, p. 90 ⁴ .	O
Species			
2. <i>leucocephalus</i> . . . (Linn.), p. 304.	1878, 453	Audubon, Birds of America, pl. 31 ⁵ . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 326.	6
		Saunders, Ibis, 1883, p. 350.	Skel. 1

¹ Here referred to the genus *Haliaëtus*.

² Here figured under the designation of "Falco leucopterus."

³ One of the specimens mentioned in this note survived till the summer of 1882, the other having died some years previously; both were typical males, and are preserved in the Norwich Museum.

⁴ Described from a female, not fully adult, obtained at Bering Island. See also 'Ibis,' 1884, p. 109.

* Here referred to the genus *Falco*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
3. vocifer (Daud.) p. 310.	1859 , 239 1878 , 453	Des Murs, Ieon. Orn. p. 8. Ayres, Ibis, 1859, p. 238 ; 1862, p. 36 ; 1877, p. 340. V. Heuglin, Orn. N.O.- Afrika's, p. 53. Sharpe's Layard, p. 46.	7 Skel. 1
4. vociferoides , <i>Des Murs</i> , p. 311.	1869 , 449 1878 , 453 454	Des Murs, Ieon. Orn. pl. 7. Milne-Edwards et Grandi- dier, Ois. de Madagasear, vol. i. p. 24, vol. ii. pls. 9, 9 _A , 9 _A bis.	Head and foot only.
5. leucoryphus (Pall.). p. 308.	,, 454 455	Irby, Zoologist, vol. xv. p. 5353. Irby, Ibis, 1861, p. 222 ¹ . Hume, Nests and Eggs of Indian Birds, p. 45 ¹ . Severtzoff, Ibis, 1875, p. 99 ; 1883, p. 53. Seully, Stray Feathers, vol. iv. p. 124. Danford, Ibis, 1878, p. 3 ; 1880, p. 92. Dresser, Birds of Europe, vol. v. p. 545, pl. 346. Prjevalsky, Rowley's Orn. Misc. vol. ii. p. 148 ¹ . Oates, Birds of British Bur- mah, vol. ii. p. 200.	4
6. leucogaster (Gmel.). p. 307.	1862 , 36 1882 , 235	Gould, Birds of Australia, vol. i. pl. 3 ² . Hume, Nests and Eggs of Indian Birds, p. 48. Legge, Birds of Ceylon, p. 67. Salvadori, Orn. della Papu- asia e dello Molucehe, pt. 1, p. 7 ³ .	6

¹ The specific name "macei" is here used.² Here figured under the title "Ichthyaetus leucogaster."³ Here referred to the genus *Concuma*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
HALIAËTUS.			
6. leucogaster (continued).		Oates, Birds of British Burmah, vol. ii. p. 199.	
Genus 3.			
POLIOAËTUS.	1878 , 455		
Species			
1. ichthyaëtus (Horsf.), p. 452.	,, 455 to 457	Schlegel, Valk Vogels, pp. 13, 52, pl. 5. figs. 1, 2 ¹ . Hume, Nests and Eggs of Indian Birds, p. 43. Legge, Birds of Ceylon, p. 72.	4
2. plumbeus (Hodgs.), pp. 452, 453 ² .	,, 455 to 457	Hume, Nests and Eggs of Indian Birds, p. 43. A. Anderson, P. Z. S. 1876, p. 777, pl. 82.	3
Subspecies			
a. humilis (Müll. & Schleg.), p. 454.	,, 455 457 458	Schlegel, Valk Vogels, pp. 13, 53, pl. 5. fig. 3 ¹ . Hume, Stray Feathers, vol. ix. p. 244.	2
Subfamily 11.			
BUTEONINÆ.			
Genus 1.			
ARCHIBUTEO ³ .			
Species			
1. lagopus ⁴ (Gmel.) p. 196.	,, 1876, 372 to 375	Newton's Yarrell, vol. i. p. 115.	12 Skel. 1

¹ Referred by Professor Schlegel to the genus *Pandion*.

² Mr. Sharpe does not separate *P. plumbeus* from *P. ichthyaëtus*, though he only doubtfully unites them.

³ The genus *Archibuteo* occupies an intermediate position between the smaller species of the Aquiline genus *Nisaëtus* and the Buzzards of the genus *Buteo*. I cannot agree with the view taken by Mr. Seebold, in his 'History of British Birds,' vol. i. p. 111, in amalgamating the genera *Aquila* and *Archibuteo*, and styling the British species "Aquila lagopus;" the latter, I may add, in Newton's Yarrell, is referred to *Buteo*.

⁴ Mr. Seebold, in the 'Ibis' for 1883, p. 122, suggests that the oldest specific name

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
		Dresser, Birds of Europe, vol. v. p. 471, pls. 334, 335. Seebohm, British Birds, vol. i. p. 111.	
Subspecies a. <i>sancti-johannis</i> (Gmel.), p. 197.	1876, 375 376	Swainson and Richardson, Fauna Bor.-Amer. pt. 2, p. 52, pl. 28 ¹ . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 304.	10
Species 2. <i>ferrugineus</i> (Licht.), p. 199.	,, 376	Gray's Genera, vol. i. pl. 6 ² . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 300.	3
3. <i>hemiptilopus</i> ³ (Blyth, p. 199, pl. 7. fig. 2.)	,, 370 to 372 1879, 178 to 180	Hume, Stray Feathers, vol. iv. p. 369. David et Oustalet, Ois. de la Chine, p. 20, pl. 7 ³ .	2
4. <i>cryptogenys</i> *? (Hodgs., p. 199 ⁴ .)	1876, 370 to 372	Hodgson, Calcutta Journ. of Nat. Hist. vol. viii. p. 94, pl. 3. fig. 1.	0

for the European Rough-legged Buzzard is "*norvegicus* of Latham;" the names quoted for this species in Latham's 'General Synopsis,' pt. 1, p. 75, are "*Falco norvegicus*, Leemius," and "*Falco lagopus*, Brün.;" the ornithology of Brünnich, a binomial treatise, was published in 1764, whilst the work of Leems bears the date of 1767; I therefore submit that the specific name of *lagopus* is correctly used.

¹ There figured as "*Buteo lagopus*."

² There figured as "*Archibuteo regalis*."

³ I have given, in my Notes, my reason for applying to this species the specific name of *hemiptilopus* rather than that of *strophius* employed by Mr. Sharpe, and also by Messrs. David and Oustalet; it is worthy of remark that in this species the character of the scutellation on the back of the tarsus approaches nearer to that of the typical Buzzards than is the case in the American and European species of the genus *Archibuteo*.

⁴ Mr. Sharpe unites *A. hemiptilopus* and *A. cryptogenys*, and is perhaps right in doing so, though I consider this a doubtful question, and have discussed it as such in my Notes above referred to.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 2. BUTEO. Species 1. leucocephalus <i>Hodgs.</i> , pp. 182, 176, pl. 8 ¹ .	1876 , 369 370	Hodgson, P. Z. S. 1845, p. 37. Temminck and Schlegel, Fauna Japonica, Aves, p. 18, pl. 7 ¹ . Prjevalsky, Rowley's Orn. Misc. vol. ii. p. 142 ¹ . David et Oustalet, Ois. de la Chine, p. 19, pl. 9 ¹ .	1
2. ferox ² (<i>Gmel.</i>) p. 176.	, , 367 368	Scully, Stray Feathers, vol. iv. p. 124, and vol. viii. p. 225. Hume, Stray Feathers, vol. iv. p. 362. Dresser, Birds of Europe, vol. v. p. 463, pl. 333. Wardlaw Ramsay, Ibis, 1880, p. 47. Biddulph, Ibis, 1881, p. 42. Scully, Ibis, 1881, p. 420.	17³ Skel. 1
3. menetriesi ⁴ , <i>Bogd.</i> ⁴		Bogdanow, Tr. Soc. Kazan, vol. viii. p. 45. Secbohm, Ibis, 1883, p. 5.	0

¹ The specimen figured by Mr. Sharpe is referred by him to "*Buteo ferox*," as to which, and also as to my present use of the specific name of "*leucocephalus*" in place of that of "*hemilasius*," used by Mr. Sharpe and by the other authors above referred to, except Mr. Hodgson, see Appendix E. Prjevalsky refers this species to the genus *Archibuteo*.

² See Appendix E.

³ One of these specimens was obtained by Canon Tristram at El Tarf, on the eastern frontier of Algeria, and is the most westerly example of this species with which I am acquainted.

⁴ See Appendix E.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
4. plumipes ¹ (<i>Hodgs.</i>), 1876, 369 p. 180, pl. 7. fig. 1.		Temminck and Schlegel, Fauna Japon. pls. 6 & 6B. Jerdon, Ill. Ind. Orn. pl. 27 ² . Scully, Stray Feathers, vol. iv. p. 125, and vol. viii. p. 225. Hume, Stray Feathers, vol. iv. p. 358, and vol. v. p. 347. J. H. G. Stray Feathers, vol. v. p. 65. David et Oustalet, Ois. de la Chine, p. 19. Legge, Birds of Ceylon, p. 31. Scully, Ibis, 1881, p. 421.	26
5. desertorum ³ (<i>Daud.</i>) 1862, 361 p. 179. 1876, 366	to 363 367	Levaillant, Jeune, Expl. de l'Algérie, Oiseaux, pl. 3 ⁴ . Irby, Orn. of Gibraltar, p. 37. J. H. Gurney, jun., Rambles of a Naturalist, p. 142. Hume, Stray Feathers, vol. x. p. 159. J. H. G. Stray Feathers, vol. v. p. 65, and vol. x. p. 327. Dresser, Birds of Europe, vol. v. p. 457, pl. 332. Sharpe's Layard, p. 30. Ayres, Ibis, 1880, p. 257. Du Bocage, Orn. d'Angola, p. 25.	29

¹ See Appendix E with reference to "*B. plumipes*," and to "*B. japonicus*" of Temminck and Schlegel as synonymous therewith.

² There figured under the name "*Buteo rufiventer*."

³ See Appendix E.

⁴ There figured under the name "*Falco cirtensis*."

Nomenclature, with references to Sharpe's Cat., vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
BUTEO.			
Species			
6. <i>vulgaris</i> ¹ , L. wch. 1876, 364 p. 186.	364 Newton's Yarrell, vol. i. 1864 p. 109.	Irby, Orn. of Gibraltar, p. 37.	16 Skel. 2
7. <i>brachypterus</i> , P. L. 1869, 449 p. 183.	1876, 335	Roeh and Newton, Ibis, 1862, p. 266, pl. 8. Milne-Edwards et Grand- dier, Ois. de Madagascar, vol. i. p. 84, vol. ii. pls. 22, 23, 26A.	6
8. <i>solitarius</i> , P. L. p. 452 (footnote) ² .	..	Selater, P. Z. S. 1878, p. 348. 231 J. H. G. P. Z. S. 1878, p. 348. Selater, Report on Voyage of H.M.S. 'Challenger,' Zool. vol. ii. part 8, p. 96, pl. 21. J. H. G. Report on Voyage of H.M.S. 'Challenger,' Zool. vol. ii. part 8, p. 93.	O
9. <i>auguralis</i> , Sclv. p. 173 ³ (footnote).	..	467 Sharpe's Layard, p. 29. 468 Du Boege, Orn. d'Angola, p. 22.	1

¹ See Appendix E.² A remarkable albino specimen here mentioned was presented by my son to the Norwich Museum.³ There referred to as *Buteo solitarius*.⁴ See Appendix F.⁵ The British Museum possesses a specimen of *Buteo auguralis* from the Gabon which was inadvertently inserted in Mr. Sharpe's Catalogue as *Buteo solitarius*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwiche Museum.
10. augur , Rüpp. pp. 175, 458.	1876, 467 to 469	Rüppell, Noue Wirb. Vögel, p. 38, pls. 16 & 17 ¹ . Sharpe's Layard, p. 28. Du Bocage, Orn. d'Angola, p. 24. Du Bocage, 21st Portuguese West African List, p. 2.	8
11. jakal (Daud.) p. 173.	,, 467 to 469 ²	Levaillant, Ois. d'Afrique, p. 73, pl. 16 ³ . Ayres, Ibis, 1859, p. 240; 1860, p. 204; 1877, p. 340. Sharpe's Layard, p. 26.	17 Skel. 1
12. borealis (Gmel.) p. 188.	,, 236 to 239	Audubon, Birds of America, pl. 51. Baird, Brewer, and Ridg- way, Land Birds of N. America, vol. iii. pp. 257, 282.	6 ⁴
Subspecies a. calurus , Cass. ⁵ p. 189.	,, 236 to 239 241	Baird, Cassin, and Law- rence, Birds of N. Amer- ica, p. 22, pl. 14. Baird, Brewor, and Ridg- way, Land Birds of N. Americe, vol. iii. pp. 258, 286.	25 Skel. 1

¹ The birds figured by Rüppell on his pl. 17 under the name of "*Buteo hydrophilus*" appear to be immature specimens of *B. augur*.

² In my Notes, above referred to, I adopted for this and the two preceding species Sundevall's subgeneric appellation of *Pterolestes*; but I have not done so in this list, as, after many attempts, I have found myself unable to arrange to my own satisfaction a subgeneric division of the species which I have here placed together in the genus *Buteo*: at the same time I am very sensible that this aggregation of species comprises several more or less distinct natural groups, which might be appropriately represented by subgeneric divisions; as to two of these, see my note in the 'Ibis' for 1876, p. 76.

³ Levaillant calls this Buzzard "Le Rouoir."

⁴ One of these specimens is a nearly complete albino, presented by Mr. Edward Newton, who obtained it in Jamaica.

⁵ In my notes on this species I have given my authority for using the specific name of *calurus* rather than that of *montanus* adopted by Mr. Sharpe.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
BUTEO.			
Subspecies			
<i>b. krideri</i> *, Hoopes . . . p. 458.	1876, 239	Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 258, 284.	○
<i>c. lucasanus</i> *, Ridg. . . p. 458.	,, 239	Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 258, 285.	○
Species			
<i>13. costaricensis</i> . . . Ridg., p. 458.	,, 239 240	Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 258, 285 (footnote).	1
<i>14. socorroensis</i> * . . . Ridg.	. . . . .	Ridgway, Proc. U. S. Nat. Mus. vol. iii. p. 220 ¹ .	○
<i>15. harlani</i> (Aud.) . . . p. 191.	1876, 240 241	Audubon, Birds of America, pl. 86 ² . Salvin, Ibis, 1874, p. 314. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 258, 292.	1
<i>16. cooperi</i> *, Cass. . . p. 172 (footnote).	,, 241 242	Baird, Cassin, and Lawrence, Birds of N. America, p. 31, pl. 16. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 258, 295.	○

¹ There described under the title of "*Buteo borealis (socorroensis)*," as "a species or race" peculiar to the island of Socorro; Mr. Ridgway also mentions as probably distinct the Buzzard inhabiting the island of Tres Marias.

² Audubon refers both this species and *B. borealis* to the genus *Falco*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
17. <i>lineatus</i> (Gmel.) . . . p. 191.	1876, 232 233	Audubon, Birds of America, pls. 56 & 71 ¹ . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 257, 275.	3 Skel. 1
Subspecies			
a. <i>elegans</i> , Cass. p. 192 ² .	” 232 233	Baird, Cassin, and Lawrence, Birds of N. America, p. 28, pl. 2 (adult), pl. 3 (immature). Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 257, 277.	2
Species			
18. <i>abbreviatus</i> , Cass.. . . p. 163 ³ .	” 67 68 231 232	Sclater, Trans. Zool. Soc. vol. iv. p. 263, pl. 59. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 257, 272 ³ . Brewster, Bull. Nuttall Orn. Club, vol. iv. p. 80. Sclater, P.Z.S. 1883, p. 348.	2 ³
19. <i>pennsylvanicus</i> ⁴ . . . (Wils.), p. 193.	” 233 234	Audubon, Birds of America, pl. 91 ⁴ . Cassin, Birds of California &c. p. 100. Sclater and Salvin, P. Z. S. 1869, p. 129.	33

¹ Audubon figured this species under the name of "*Faleo hyemalis*."

² Mr. Sharpe does not separate *Buteo elegans* from *B. lineatus*; as mentioned in my notes, I consider them to be distinct.

³ One of these is the type of *Buteo zonocereus*, under which name this specimen has been figured in the 'Transactions of the Zoological Society,' vol. iv. pl. 59, and also in Mr. Elliot's work on 'New Birds of North America,' vol. ii. pl. 33. The same specific name is used by the authors of the 'Land Birds of N. America.' This species is referred by Mr. Sharpe to Kaup's genus *Tschytriorchis*.

⁴ Mr. Sharpe applies to this very Asturine Buzzard the specific name "*latissimus*," as to which see my notes above referred to and the editorial footnote appended thereto; also the late Mr. Cassin's note cited above. Audubon refers this Buzzard, as he does others also, to the genus *Faleo*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
<p style="text-align: center;">BUTEO.</p> <p>19. pennsylvanicus (continued).</p>		<p>Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 256, 259.</p> <p>Ridgway, on the Subgenus <i>Craxirex</i>, p. 116.</p> <p>Lister, <i>Ibis</i>, 1880, p. 43.</p>	
<p>20. swainsoni, Bon. . . 1876, 234 p. 184¹.</p>	<p style="text-align: right;">1876, 234 to 236</p>	<p>Swainson and Richardson, <i>Faun. Bor.-Am.</i> pt. 2, p. 47, pl. 27 (♀ adult)².</p> <p>Cassin, <i>Birds of California &c.</i> p. 198, pl. 31 (upper figure immature, lower melanistic)³, and p. 257, pl. 41 (immature)⁴.</p> <p>Baird, Cassin, and Lawrence, <i>Birds of N. America</i>, p. 19, pl. 12 (♂ adult), pl. 13 (♀ adult), and pl. 15, fig. 2⁵.</p> <p>Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. pp. 256, 263.</p>	<p style="text-align: right;">7</p>

¹ There called *Buteo obsoletus*.

² There called *Buteo vulgaris*.

³ There called *Buteo insignatus*.

⁴ There called *Buteo bairdii*.

⁵ The specimen here figured is the type of *Buteo oxypterus*, Cassin; Mr. Ridgway, in reply to an inquiry which I made respecting it, writes as follows:—"It has been more than ten years since I saw the specimen in question; but my recollection of it is that it agreed very exactly with a specimen from Costa Rica and another from Buenos Ayres, both in the National Museum collection, and both of which are unquestionably young of typical *B. swainsoni*. I will not be positive as to the number of primaries emarginated, but I am almost sure there were only three. The specimen is of rather small dimensions, but I think not smaller than some young males of *B. swainsoni*, which varies much in size, irrespective of locality, though, as a rule, southern specimens are smaller than northern ones."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
		Ridgway, on the Subgenus <i>Craxirex</i> , p. 100. Editorial note, Ibis, 1875, p. 500.	
21. unicolor *..... <i>D'Orb. et Laf.</i> , p. 172 ¹ .	1876 , 69 242	D'Orbigny, Voyage, Ois. p. 109. Selater and Salvin, P. Z. S. 1879, p. 637.	○
22. albicaudatus <i>Vieill.</i> , p. 162 ² .	67 68 71 to 73 76	Temminck, Pl. Col. pls. 56 & 139 ² . Ridgway, on the Subgenus <i>Craxirex</i> , p. 98. Lee, Ibis, 1873, p. 136 ³ . Durnford, Ibis, 1877, p. 187. Brewer, Ibis, 1878, p. 487.	18
23. hypospodius <i>Gurn.</i>	73 to 76 pl. 3	Selater and Salvin, P. Z. S. 1877, pp. 487, 540.	3
24. pœcilocroous <i>Gurn.</i>	1879 , 176 to 178	.....	○
25. erythronotus <i>(King)</i> , p. 172.	1876 , 68 69 76	D'Orbigny, Voyage, Ois. p. 106, pl. 3 ⁴ . Ridgway, on the Subgenus <i>Craxirex</i> , p. 96. Durnford, Ibis, 1877, p. 38, and 1878, p. 397.	13⁵

¹ Mr. Sharpe gives *Buteo unicolor* as a synonym of *B. erythronotus*, respecting which see my Notes.

² This species is the type of Kaup's genus *Tachytriorehis*, in which it is also placed by Mr. Sharpe; it is figured by Temminck as " *Falco pterocles*."

³ There spoken of as *Buteo pterocles*.

⁴ There figured under the specific name " *tricolor*."

⁵ One of the specimens preserved in the Norwich Museum is the type of *Buteo varius*, Gould.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
BUTEO.			
Species			
26. leucops? , <i>Gray</i> p. 170 ¹.	. . . . .	G. R. Gray, List of Birds in the British Museum (1848), p. 36.	○
27. exsul , <i>Salvin</i>	1876 , 69 76	Salvin, Ibis, 1875, p. 371.	1
28. poliosomus (<i>Quoy et Gaim.</i>), p. 171.	,, 69 to 71 76	Quoy et Gaimard, Voyage de l'Uranie, Zool. p. 92, pl. 14. Ridgway, on the Subgenus <i>Craxirex</i> , p. 94.	9
29. galapagensis ¹ (<i>Gould</i>), pp. 170, 457.	,, 76	Gould, Zool. of Voyage of the 'Beagle,' Birds, p. 23, pl. 2 ² . Ridgway, on the Subgenus <i>Craxirex</i> , p. 93. Salvin, Trans. Zool. Soc. vol. ix, p. 495.	○
Genus 3.			
ANTENOR.	1875 , 234		
Species			
1. unicinctus ³ (<i>Temm.</i>) pp. 85, 456.	,, 234 235	Temminck, Pl. Col. pl. 313 ³ . D'Orbigny, Voyage, Ois. p. 93 ³ . Ridgway, Studies of American Falconidæ, p. 161. Gibson, Ibis, 1879, p. 411.	5

¹ Mr. Sharpe refers *Buteo leucops* to *B. galapagensis*, as to which see Appendix G.

² Mr. Gould here proposed the genus *Craxirex*, with this species for its type.

³ Mr. Sharpe treats *A. unicinctus* and *A. harrisi* as one and the same species: Temminck refers the former, and Audubon the latter, to the genus *Falco*; D'Orbigny the former to the genus *Astur*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. harrisi (Aud.), p. 85.	1875 , 234 235	Audubon, Birds of America, pl. 392. Dresser, Ibis, 1865, p. 329 ¹ . Grayson, Memoirs of Boston Nat. Hist. Soc. vol. ii. p. 299. Ridgway, Studies of American Falconidæ, pp. 162, 302.	3 Skel. 1
Genus 4.			
ONYCHOTES.			
Species			
1. gruberi , Ridg. . . . p. 158 (footnote).	1876 , 476 1881 , 396 to 398 pl. 12 ²	Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 254. Ridgway, Studies of American Falconidæ, p. 135.	0
Genus 5.			
BUTEOLA ³ .			
Species			
1. brachyura (Vieill.) pp. 185 ⁴ , 201.	1876 , 235 477 to 480	Selater, Trans. Zool. Soc. vol. iv. p. 267, pl. 62. Lawrence and Sumichrast, Birds of S.W. Mexico, in Bull. of U. S. Mus. no. 4, p. 42 ⁵ . Ridgway, Bull. of Nuttall Orn. Club, vol. vi. p. 207.	6

¹ Here referred to as "Craxirex unicinetus."

² By an unfortunate inadvertence the specific name of *gruberi* was here misspelled "grueberi."

³ As to this genus, and in correction of my notes relating thereto, see Appendix II.

⁴ Mr. Sharpe here cites the melanistic phase, under the title of *Buteo fuliginosus*, amongst the synonyms of *B. swainsoni*.

⁵ Here referred to under the name of *Buteo minutus*.

⁶ Of these specimens two are normal, one is partially melanistic, and three are wholly so; one of these three is the type of *Buteo fuliginosus*, Selater, and was figured under that name in the 'Transactions of the Zoological Society,' as above referred to.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwiche Museum.
BUTEOLA. Species			
2. leucorrhœa (<i>Quoy et Gaim.</i>), p. 209 ¹ .	1876 , 480 481	Quoy et Gaimard, <i>Voyage de l'Uranie</i> , Zool. p. 91, pl. 13. Selater and Salvin, <i>Exotic Orn.</i> p. 180.	5
Genus 6.			
RUPORNSIS². Species			16
1. magnirostris (<i>Gmel.</i>), p. 207.	,, 482	Buffon, <i>Pl. Enl. vol. i. pl. 464</i> ³ .	
		Selater and Salvin, <i>Exotic Orn.</i> p. 180.	
		Salvin and Godman, <i>Ibis</i> , 1880, p. 176.	
2. ruficauda (<i>Scl. & Salv.</i>), p. 205.	,, 482 483 ⁴	Selater and Salvin, <i>Exotic Orn.</i> pp. 175, 180, pl. 88.	9
3. nattereri (<i>Scl. & Salv.</i>), p. 208.	,, 481	Selater and Salvin, <i>Exotic Orn.</i> pp. 173, 180, pl. 87.	5
4. saturata (<i>Scl. & Salv.</i>)	,, 481	Selater and Salvin, <i>P. Z. S.</i> 1876, p. 357.	0
5. pucherani (<i>Verr.</i>) .. p. 205.	,, 481	Selater and Salvin, <i>Exotic Orn.</i> pp. 177, 180, pl. 89. Selater and Salvin, <i>P. Z. S.</i> 1876, p. 358.	4⁵
6. ridgwayi⁶ , <i>Cory</i> ..	.....	Lee, <i>Ibis</i> , 1873, p. 136. <i>Cory</i> , in <i>Quart. Journ. of Boston Zool. Soc.</i> vol. ii. p. 46.	0

¹ This species is referred by Mr. Sharpe and by the authors of 'Exotic Ornithology' to the genus *Asturina*, as to which see Appendix H. It is figured in the 'Voyage de l'Uranie' under the title of "Falco leucorrhous."

² The several species of the genus *Rupornis* are included by Mr. Sharpe in that of *Asturina*, as also by the authors of 'Exotic Ornithology.'

³ Here figured under the designation of "L'Epervier à gros bec de Cayenne."

⁴ The northern race for which Mr. Ridgway has proposed the title of "var. *griseo-cauda*" (*vide Catalogue of Falconidae in Boston Museum*), p. 48) seems to me to merge so gradually into *R. ruficauda* that I am not able satisfactorily to separate them, though in my Notes I have endeavoured to do so.

⁵ One of these specimens is J. and E. Verreaux's type of this species.

⁶ Mr. Ridgway informs me that this newly described species is very distinct; it is a native of Haiti.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 7. BUTASTUR ¹ .	1876 , 483		
Species 1. teesa (Frankl.) p. 295.		Gray and Hardwicke, Ill. Indian Zoology, vol. ii. pl. 30 ² . Hume, Nests and Eggs of Indian Birds, p. 49. Oates, Birds of British Burmah, vol. ii. p. 195.	12
Subspecies a. indicus (Gmel.) p. 297.	234 1882 , 235	Schlegel, Valk Vogels, pp. 33, 70, pl. 21. figs. 2 & 3 ³ . Tweeddale, Collected Works, pp. 140, 310. Hume and Davison, Stray Feathers, vol. vi. p. 19. David et Oustalet, Ois. de la Chine, p. 18. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 14. Oates, Birds of British Burmah, vol. ii. p. 197.	14
Species 2. liventer (Temm.) p. 296.		Schlegel, Valk Vogels, pp. 33, 69, pl. 21. fig. 1 ² . Oates, Birds of British Burmah, vol. ii. p. 196.	5
3. rufipennis (Sund.) p. 299.		Strickland, P. Z. S. 1850, p. 214, pl. (Aves) 22 ² . Shelley, P. Z. S. 1881, p. 563.	5

¹ Mr. Hume and many other authors refer to this genus under Kaup's title of *Poliornis*.

² Here referred to the genus *Buteo*.

³ Here figured as " *Buteo poliogenys*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 8.			
ASTURINA.			
Species			
1. nitida (<i>Lath.</i>), p. 203.	1876 , 483	Temminck, Pl. Col. pls. 87 & 294 ¹ . Léotaud, <i>Ois. de la Trinidad</i> , p. 46 ¹ .	7
		Selater and Salvin, <i>Exotic Orn.</i> p. 180. Baird, Brewer, and Ridgway, <i>Land Birds of N. America</i> , vol. iii. p. 245.	
2. plagiata (<i>Licht.</i>)	p. 204.	,, 483	Selater and Salvin, <i>Exotic Orn.</i> pp. 179, 180, pl. 90.
		Baird, Brewer, and Ridgway, <i>Land Birds of N. America</i> , vol. iii. p. 246.	8
		Lawrence and Sumichrast, <i>Birds of S.W. Mexico</i> , in <i>Bull. of U. S. Mus.</i> no. 4, p. 39.	Skel. 1
Genus 9.			
GERANOAËTUS.			
Species			
1. melanoleucus	,, 66	Temminck, Pl. Col. pl. 302 ² .	6
(<i>Vieill.</i>), p. 168 ² .	67	D'Orbigny, <i>Voyage, Ois.</i> p. 76 ² .	Skel. 1
		Lee, <i>Ibis</i> , 1873, pp. 131, 136.	
		Ridgway, <i>Studies of American Falconidæ</i> , p. 131.	
		Durnford, <i>Ibis</i> , 1877, p. 38; 1878, p. 397.	
		Gibson, <i>Ibis</i> , 1879, p. 409.	

¹ Temminck refers this species to the genus *Falco*; Léotaud to the genus *Astur*.

² Mr. Sharpe refers this species to the genus *Buteo*; D'Orbigny to *Haliaëtus*; Temminck, whose plate is not a satisfactory one, adopts for it the title of "*Falco aquia*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 10. LEUCOPTERNIS ¹ .			
Species 1. princeps , <i>Sclat.</i> & <i>Salv.</i> , p. 220.	1876, 67	Sclater, P. Z. S. 1865, pl. 24. Salvin, Ibis, 1872, pp. 241, 243.	○
2. palliata (<i>Natt.</i>) p. 218.	,, 471 472	Sclater and Salvin, Exotic Orn. p. 97, pl. 49, and p. 122. Salvin, Ibis, 1872, p. 242.	5
3. ghiesbreghti ² (<i>Du Bus</i>), p. 217.	,, 470 471	Du Bus, Esquisses Orn. pl. 1. Sclater and Salvin, Exotic Orn. p. 121. Belt, Naturalist in Nicaragua, p. 340. Salvin, Ibis, 1872, p. 242.	3
4. albicollis (<i>Lath.</i>) p. 216.	,, 472 to 474	Temminck, Pl. Col. pl. 9 ³ . Léotaud, Ois. de la Trinidad, p. 7 ³ . Sclater and Salvin, Exotic Orn. p. 122. Salvin, Ibis, 1872, p. 242.	2
5. occidentalis , <i>Salv.</i> ..	,, 475 476 (foot-note).	Salvin, Ibis, 1876, p. 496. Salvin, Ibis, 1872, p. 242.	○
6. lacernulata (<i>Temm.</i>), p. 218.	,, 474	Temminck, Pl. Col. pl. 437. Sclater and Salvin, Exotic Orn. p. 122 ⁴ . Salvin, Ibis, 1872, p. 242 ⁴ .	5

¹ Mr. Sharpe includes the species forming the genus *Leucopternis* in that of *Urubitinga*.

² This specific name is spelt, in Mr. Sharpe's volume, "ghiesbrechti;" but the spelling I have adopted is in accordance with that of Du Bus, who also calls this species "Buse de Ghiesbrecht."

³ Described by Temminck as "Falco pæcilonotus," and by Léotaud as "Buteo pæcilonotus."

⁴ Here referred to as *L. scotoptera*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
LEUCOPTERNIS.			
Species			
7. melanops (<i>Lath.</i>)	1876, 474 p. 220.	Temminck, Pl. Col. pl. 105. Selater and Salvin, Exotic Orn. p. 122. Salvin, Ibis, 1872, p. 242.	4
8. superciliaris , <i>Pelz.</i>	p. 219.	Selater and Salvin, Exotic Orn. p. 75 ¹ , pl. 38. Salvin, Ibis, 1872, p. 242.	2
9. semiplumbea	1876, 475 <i>Lawr.</i> , p. 220.	Selater and Salvin, Exotic Orn. p. 121, pl. 61. Salvin, Ibis, 1872, p. 243.	0
10. plumbea , <i>Salv.</i>	p. 216.	Salvin, Ibis, 1872, pp. 240, 243, pl. 8.	0
11. schistacea (<i>Sund.</i>),	p. 216.	Selater, Trans. Zool. Soc. (foot- note) ² . Salvin, Ibis, 1872, p. 243.	7
Genus 11.			
URUBITINGA.			
Species			
1. anthracina (<i>Licht.</i>),	p. 215.	Lawrence and Sumichrast, Birds of S.W. Mexico, in Bull. of U. S. Mus. no. 4, p. 42.	8

¹ In this article the authors give their reasons for applying to this species the specific name of "*superciliaris*" rather than that of "*kaupi*" adopted by Mr. Sharpe.

² Subsequently to the publication of the Note above referred to, I have become acquainted with the immature dress of this species, which differs from that of the adult in the presence of narrow transverse white bars on the abdomen, flanks, crissum, tibiæ, under wing-coverts, and axillaries, whilst the inner webs of the secondaries are mottled with two shades of grey, and those of the primaries are either broadly barred or mottled with white, the white mottling in the latter case being occasionally a little mingled with dark rufous.

³ Here figured under the name of "*Urubitinga schistacea*," from a specimen in the Norwich Museum.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. <i>gundlachii</i> * ?, <i>Cab.</i> , p. 215 ¹ .	1876, 488 489	Lembaye, Aves de Cuba, pl. 3. fig. 3 ² . Cabanis, Journal für Orn. 1854, extra p. 80 ³ . Gundlach, Journal für Orn. 1871, p. 365 ³ .	○
3. <i>zonura</i> ⁴ (<i>Shaw</i>) p. 213.	,, 487	Spix, Av. Bras. vol. i. pl. 1b (adult) ⁵ . Temminck, Pl. Col. pl. 55 (immature) ⁵ . D'Orbigny, Voyage, Ois. p. 84 ⁵ . Ridgway, Studies of American Falconidæ, p. 168.	8
Subspecies a. <i>ridgwayi</i> , <i>Gurn.</i> ⁴ n. s.	. . . . .	Lawrence and Sumichrast, Birds of S.W. Mexico, in Bull. of U. S. Mus. no. 4, p. 42 ⁶ .	1
Genus 12. HARPYHALIAETUS.	Species		
1. <i>solitarius</i> (<i>Tschudi</i>) ⁷ , p. 222.	1876, 490 to 492	Tschudi, Fauna Peruana, Orn. p. 94, pl. 2 ⁸ .	2
2. <i>coronatus</i> (<i>Vieill.</i>), pp. 221, 458 ⁵ .	,, 486 487 ⁹ 490 to 493	D'Orbigny, Voyage, Ois. p. 75 ¹⁰ . Lee, Ibis, 1873, p. 136.	1

¹ Included by Mr. Sharpe amongst the synonyms of *U. anthonracina*.

² Here described under the name " *Morphnus urubitinga*."

³ Here referred to the genus *Hypomorphnus*.

⁴ See Appendix I.

⁵ Spix refers this species to the genus *Aquila*, Temminck to *Falco*, and D'Orbigny to *Morphnus*, all three using the specific name " *urubitinga*."

⁶ Here referred to *Urubitinga zonura*, with which it is also united by Mr. Sharpe.

⁷ Mr. Sharpe includes this species, though somewhat doubtfully, amongst the synonyms of *H. coronatus*.

⁸ Here figured under the name of " *Circaetus solitarius*."

⁹ The Notes here referred to relate to " *Plangus neogæus*" of Sundevall, which I now think was probably founded on the first plumage of *H. coronatus*, or possibly of *H. solitarius*.

¹⁰ D'Orbigny refers this species to the genus *Circaetus*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 13. HETEROSPIZIAS. Species 1. meridionalis (<i>Lath.</i>), 1876 , 66 p. 160.		Temminck, Pl. Col. pl. 25 ¹ . Tschudi, Fauna Peruana, Orn. pp. 84, 88 ¹ . Lee, Ibis, 1873, p. 136. Ridgway, Studies of American Falconidæ, p. 139.	4
Genus 14. BUTEOGALLUS. Species 1. æquinoctialis (<i>Gmel.</i>), p. 212.	,, 484 to 486	Levaillant, Ois. d'Afrique, vol. i. p. 86, pl. 21 ² . Ridgway, Studies of American Falconidæ, p. 141.	5
Genus 15. BUSARELLUS. Species 1. nigricollis (<i>Lath.</i>).. p. 211.	,, 484 to 486	Levaillant, Ois. d'Afrique, vol. i. p. 84, pl. 20. Pr. Maximilian, Beiträge, vol. iii. p. 213 ³ . Selater and Salvin, Ibis, 1859, p. 216 ⁴ . Selater and Salvin, P. Z. S. 1873, p. 302 ⁴ . Ridgway, Studies of American Falconidæ, p. 142.	6

¹ Temminck, whose figure of this species is but a poor one, applies to it the designation of "*Falco rutilans*;" Tschudi that of "*Hypomorphnus rutilans*;" Lee refers it to the genus *Urubitanga*.

² Le Vaillant calls this species "Le Buson," and the succeeding one "Le Buserai," and says that both were sent to him from Cayenne, though figured in his "Oiseaux d'Afrique."

³ Here described under the name "*Falco busarellus*."

⁴ Here referred to the genus *Buteogallus*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subfamily 12. <i>MILVINÆ.</i>	1878 , 459 ¹		
Genus 1. HALIASTUR.	1879 , 464 ¹		
Species			
1. indus (<i>Bodd.</i>), p. 313.	1878 , 460 to 462	Buffon, Pl. Enl. vol. i. pl. 416 ² .	7
	465 466	Humc, Nests and Eggs of Indian Birds, p. 51. Legge, Birds of Ceylon, p. 76.	
	1882 , 235	Oates, Birds of British Burmah, vol. ii. p. 201.	
Subspecies			
a. intermedius , <i>Gurn.</i> p. 314.	1878 , 460 to 466	Blyth, Ibis, 1865, p. 28. Schlegel, Valk Vogels, pl. 4. fig. 4 ³ .	14
		Meyer, Ibis, 1879, p. 56 ⁴ . Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 17 ⁵ .	Skel. 1
b. girrenera (<i>Vieill. et Oud.</i>), p. 315.	,, 460 461 463 to 466	Gould, Birds of Australia, vol. i. pl. 4 ⁶ . Ramsay, Cat. of Australian Accipitres, p. 33. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 15.	12

¹ In my Notes, above referred to, I considered the subfamily Milvinae as divisible into two groups, Kites and Perns; but the line of demarcation between these groups is less distinct than seems requisite to justify their division, and I therefore now include all the genera composing them in the subfamily Milvinae.

² Buffon figures this species under the designation of "Aigle des Grandes Indes."

³ Here figured under the name of "*Haliaëtus indus*."

⁴ Here referred to as "*Haliastur leucosternus*."

⁵ Count Salvadori here refers to "*Haliastur girrenera*, var. *ambigua*;" but this subspecies, proposed by the late Dr. F. Brüggemann, does not seem to me to be distinct from *H. intermedius*. The specimen from North Ceram in the Norwich Museum, referred by Count Salvadori to *H. ambiguus*, I consider to be a typical *H. girrenera*.

⁶ Here figured as "*Haliastur leucosternus*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
HALIASTUR.			
Species			
2. sphenurus (<i>Vieill.</i>), p. 316.	1878, 460 466	Gould, Birds of Australia, vol. i. pl. 5. Ramsay, Cat. of Australian Accipitres, p. 35. Salvadori, Orn. della Papu- asia e dello Molucche, pt. 1, p. 19.	7
Genus 2.			
MILVUS.			
Species.			
1. ictinus , <i>Savigny</i> p. 319.	1879, 71	Newton's Yarrell, p. 92. Drosser, Birds of Europe, vol. v. p. 643, pl. 361. Seebohm, British Birds, vol. i. p. 74 ¹ .	5 Skel. 1
2. melanotis <i>Temm. & Schleg.</i> , p. 324.	,, 76 79 to 83 ²	Temminck and Schlegel, Fauna Japonica, Aves, p. 14, pls. 5, 5 b. Hume, Nests and Eggs of Indian Birds, p. 54 ³ . Oates, Birds of British Bur- mah, vol. ii. p. 203.	22
3. govinda , <i>Sykes</i> p. 325.	,, 76 78 to 83	Hume, Nests and Eggs of Indian Birds, p. 52. Brooks, Ibis, 1879, p. 282 ⁴ .	2

¹ I take this opportunity of correcting a slight inaccuracy as to the occurrence of the Kite in Norfolk, which, by some inadvertence, has found its way into the article above referred to. Mr. Seebohm there says, "Mr. Gurney writes that he sometimes sees this bird in Norfolk passing southwards in the autumn in company with Buzzards": this paragraph appears to be founded on a notice by my son, Mr. J. H. Gurney, jun., in the 'Zoologist' for 1877, p. 260, in which he records having once witnessed such an occurrence on the 2nd of May in that year; but I know no other instance of a Kite having been seen in Norfolk in company with Buzzards, and but very few, comparatively, during the last half-century, of its occurring in the county at all.

² There is a misprint in a footnote to p. 79 of the 'Ibis,' 1879; for "1875, p. 22" read "1875, p. 229." Since my Notes on *Milvus melanotis* were published, the Norwich Museum has acquired a specimen from Kultuk, near Lake Baikal.

³ Here referred to as *Milvus major*.

⁴ Mr. Brooks here repeats the reasons which he had previously given in 'Stray Feathers,' vol. iv. p. 272, for considering that "*Milvus govinda*" of Sykes was intended by him as a designation of the larger migratory Indian Kite for which I have used

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subspecies			
a. <i>affinis</i> ?, <i>Gould</i> ¹	1879, 72 p. 323.	Gould, Birds of Australia, vol. i. pl. 21.	19
	73 76 to 79	Schlegel, Valk Vogels, pp. 30, 67, pl. 20. fig. 1.	
Species			
4. <i>migrans</i> ² (<i>Bodd.</i>)	p. 322. ,, 71 to 76	Newton's Yarrell, p. 97. Dresser, Birds of Europe, vol. v. p. 651, pl. 362. Seebohm, British Birds, vol. i. p. 80 ² .	7
5. <i>aegyptius</i> (<i>Gmel.</i>)	p. 320. ,, 71 to 74	Ayres, Ibis, 1859, p. 239. Bree, Birds of Europe, 2nd edition, vol. i. p. 124, pl.	13
		J. H. Gurney, jun., Rambles of a Naturalist, p. 139 ³ .	Skel. 1
		Sharpe's Layard, p. 49. Dresser, Birds of Europe, vol. v. p. 657.	
		Du Bocage, Orn. d'Angola, p. 43.	
		Milne-Edwards et Grandier, Ois. de Madagascar, vol. i. p. 66.	
Subgenus A.			
LOPHOICTINIA.	,, 83		
Species			
1. <i>isura</i> (<i>Gould</i>), p. 326.	1870, 536 1879, 83 84	Gould, Birds of Australia, vol. i. pl. 22 ⁴ .	3
		Sharpe, P. Z. S. 1875, p. 338.	

the specific name of "*melanotis*"; but the habits of "*M. govinda*," as described by Sykes, are not those of this species, but of the smaller Indian Kites, which are non-migratory.

¹ *M. affinis* is hardly distinguishable, even as a subspecies, from *M. govinda*.

² Mr. Sharpe adopts for this Kite the specific name of "*korschun*"; I have explained in my Notes the grounds of my preference for that of "*migrans*." Mr. Seebohm refers to this species as "*Milvus atter*."

³ The specific name "*parasiticus*" is here used.

⁴ There referred to the genus *Milvus*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 3. GYPOICTINIA.	1878 , 459		
Species			
1. melanosternon (Gould), p. 335.	,, 459 460	Gould, Birds of Australia, vol. i. pl. 20 ¹ . Sharpe, P. Z. S. 1875, p. 339. Bennett, Proc. of Linnean Society of N. S. Wales, vol. vi. p. 146 ² .	1
Genus 4. ELANOIDES.	1879 , 330		
Species	,, 330	Pr. Maximilian, Beiträge, vol. iii. p. 141 ³ . Audubon, Birds of America, pl. 72. D'Orbigny, Voyage Ois. p. 100. Dresser, Ibis, 1865, p. 325. Léotaud, Ois. de la Trinid. dad, p. 30. Newton's Yarrell, vol. i. p. 103. Selater and Salvin, P. Z. S. 1873, p. 303. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 192 ⁴ .	5
1. furcatus (Linn.) .. p. 317.			

¹ Mr. Gould, in his larger work here quoted, refers this species to the genus *Buteo*.

² Mr. K. H. Bennett here gives an interesting account of the habits of this very scarce species, as observed by him in the vicinity of the Murrumbidgee and Lachlan Rivers in New South Wales, the latter being the locality from whence the specimen at Norwich was obtained. This specimen is noted by the collector as a female, killed February 28, and as having "irides hazel, bill light horn-colour, black at tip, legs and feet whitish"; its principal measurements are—wing 18.90 inches, tarsus 2.60, middle toe s. u. 2.20, culmen, including the cere, 2.25, of which the cere occupies 1.20. The Norwich Museum also possesses a single wing from a bird of this species, the measurement of which is 20 inches.

³ Prince Maximilian describes this Kite under the name of "*Falco yetapa*"; the other authors here cited use for it either the generic name "*Falco*," "*Milvus*," or "*Nauclerus*," but most have subsequently adopted that of "*Elanoides*."

⁴ The specific name "*forficatus*" is here used.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 5. NAUCLERUS.			
Species			
1. riocouri 1879, 330 (<i>Vieill. et Oud.</i>), p. 318.		Temminck, Pl. Col. pl. 85 ¹ . Ridgway, Studies of American Falconidæ, p. 150 and footnote ² .	3
Genus 6. GAMPSONYX.			
Species			
1. swainsoni , <i>Vig.</i> p. 340.	, 330 331	Gray's Genera, vol. i. p. 26, pl. 9. Ridgway, Studies of American Falconidæ, p. 150. Forbes, <i>Ibis</i> , 1881, p. 353.	4
Genus 7. ELANUS.			
Species			
1. cæruleus (<i>Desf.</i>) p. 336.	, 331 to 333	Andersson, Birds of Damara Land, p. 20. Hume, Nests and Eggs of Indian Birds, p. 56. Sharpe's Layard, p. 52. Dresser, Birds of Europe, vol. v. p. 663, pl. 363. J. H. Gurney, jun., Rambles of a Naturalist, p. 139. David et Oustalet, <i>Ois. de la Chine</i> , p. 17. Du Bocage, <i>Orn. d'Angola</i> , p. 44. Davidson, <i>Stray Feathers</i> , vol. x. p. 290.	18 Skel. 2

¹ Here described under the name of "*Falco riocour*."² Mr. Ridgway here introduces this African species for the sake of comparison with allied American forms.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
ELANUS.			
Species			
2. hypoleucus , Gould . 1879, 333 p. 338.	Gould, Birds of Asia, pt. 12, pl.	11 ¹	
	Tweeddale, Collected Works, p. 309.		
	Sharpe, P. Z. S. 1879, p. 314.		
3. axillaris (<i>Lath.</i>) p. 338.	,, 333 to 335	Gould, Birds of Australia, vol. i. pl. 23.	4
Subspecies			
a. leucurus (<i>Vieill.</i>) . . p. 339.	,, 334 to 336	Audubon, Birds of America, pls. 351 & 352 ² . D'Orbigny, Voyage, Ois. p. 98 ² .	5
Species			
4. scriptus , Gould p. 340.	,, 334	Gould, Birds of Australia, vol. i. pl. 24.	3 ³
Genus S.			
ICTINIA.			
Species			
1. mississippiensis . . . (<i>Wils.</i>), p. 365.	,, 336	Audubon, Birds of America, pl. 117 ⁴ . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 203.	2

¹ One of these is Mr. Gould's type of this species, as to which see my note above referred to.

² Audubon figures this species under the name of "*Falco dispar*"; D'Orbigny refers to it as "*Milvus leucurus*."

³ One of these specimens, an adult bird from the Laehlan River, New South Wales, has the following note attached to it by the collector:—"March 2nd, ♀: irides bright carmine, bill black, legs and feet white; knocked down with a stick."

⁴ Here figured under the erroneous name of "*Falco plumbeus*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwicheh Museum.
2. plumbea (<i>Gmel.</i>) ... p. 364.	1879 , 336	Temminck, Pl. Col. pl. 180 (immature) ¹ . Pr. Maximilian, Beiträge, vol. iii. p. 126 ¹ . D'Orbigny, Voyage, Ois. p. 101.	11
Genus 9. ROSTRHAMUS. Species	,, 337		
1. hamatus (<i>Ill.</i>), p. 327 ²	,, 338 to 340	Temminck, Pl. Col. pl. 61 (but not the accompanying text).	○
2. tæniurus *?, <i>Cab.</i> ... p. 328.	,, 340 341	Cabanis, Journ. für Orn. 1854, p. 80.	○
3. sociabilis (<i>Vieill.</i>) ... p. 328 ³ .	,, 337 to 339 341	Spix, Av. Bras. p. 7, pl. 2. Gibson, Ibis, 1879, p. 413.	8
Subspecies a. plumbeus ?, <i>Ridg.</i> ... p. 459.	1882 , 456 1879, 338 341 1882 , 455 456	Baird, Cassin, and Lawrence, Birds of N. America, p. 38, pl. 65 ² .	3
Genus 10. MACHÆRAMPHUS. Species	1879 , 465		
1. anderssoni (<i>Gurn.</i>). ... p. 343.	,, 465 to 469	J. H. G. P. Z. S. 1865, p. 618, and Tr. Z. S. vol. vi. p. 117, pl. 29. Andersson, Birds of Damara Land, p. 23, figs. 1, 2, & 3.	1⁴

¹ Here referred to the genus *Falco*.² There referred to *R. sociabilis*.³ Mr. Sharpe applies to this species the specific name of "leucopygus."⁴ This is the type specimen, originally described by me under the name of *Stringonyx anderssoni*, and subsequently, by an error of mine, figured under the designation of "Machæramphus aleinus."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
MACHÆRAMPHUS.			
1. anderssoni (continued).		Milne-Edwards et Grandier, Ois. de Madagascar, vol. i. p. 79; vol. ii. pls. 24, 24 a, 25, 26, 26 a. Du Boeage, Orn. d'Angola, p. 534.	
2. alcinus , West., p. 342	1879, 466 to 468	Westermann, Bijd. tot d. Dierk. p. 29, pl. 12.	1
	1882, 455	Hume, Stray Feathers, vol. iii. p. 269.	
		Hume and Davison, Stray Feathers, vol. vi. p. 24.	
		Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 25, and pt. 3, p. 506.	
Genus 11.			
PERNIS.			
Species			
1. apivorus (Linn.) . . . p. 344.	1869, 450 1880, 195 to 203 ¹	Newton's Yarrell, vol. i. p. 121. Sharpe's Layard, p. 53.	13 Skel. 1
		Dresser, Birds of Europe,	
		vol. vi. p. 3, pls. 364, 365,	
		366.	
		David et Oustalet, Ois. de	
		la Chine, p. 18.	
		Du Boeage, Orn. d'Angola,	
		p. 534.	
		Du Boeage, 23rd West Afri-	
		can List, p. 21.	
		Seeböhm, British Birds,	
		vol. i. p. 69.	

¹ See Appendix J.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. ptilorhynchus <i>(Temm.)</i> , p. 347.	1880, 203 to 212 214 to 216	Schlegel, Valk Vogels, pp. 39, 73, pl. 25. figs. 1, 2, 3, and pl. 26. figs. 1, 2, 3. Hume, Rough Notes, p. 330 ¹ . Hume, Nests and Eggs of Indian Birds, p. 55. Legge, Birds of Ceylon, p. 89.	24
3. tweeddalii , <i>Hume</i> ..	,, 213 214 216 ²	Tweeddale, Ibis, 1877, p. 286 ² . Hume, Stray Feathers, vol. ix. pp. 122, 448. J. H. G. Stray Feathers, vol. ix. p. 446 ³ .	0
4. celebensis , <i>Wald...</i> p. 349.	,, 216 217	Schlegel, Valk Vogels, pl. 26. fig. 4 ⁴ . Tweeddale, Collected Works, p. 208.	2
Genus 12. HENICOPERNIS .	1879, 469		
Species			
1. longicauda (<i>Garnot</i>), p. 341.	,, 469	Garnot, Voy. de la 'Coquille,' p. 588, pl. 10. D'Albertis, New Guinea, vol. ii. p. 296. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 22, and pt. 3, p. 505.	3

¹ There described as *Pernis cristata*; the same specific name is used by Professor Schlegel.

² Here referred to as *Pernis ptilorhynchus*.

³ I understand from Mr. Hume that he intends to publish a figure of this fine species from a drawing recently executed by Mr. Keulemans.

⁴ Here figured under the name "*Pernis cristatus*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
HENICOPERNIS.			
Species			
2. infuscata , <i>Gurn.</i> . . .	1879 , 469 470 ¹	Selater, P. Z. S. 1879, p. 450 ¹ .	○
	1882 , 128 to 131	Salvadori, Orn. della Papuasia e delle Molucche, pt. 3, p. 505.	
Genus 13.	1880 , 312		
REGERHINUS ² .	313		
Species			
1. uncinatus (<i>Temm.</i>), p. 330.	,, 313 to 319	Temminek, Pl. Col. pls. 103, 104, 115 ³ .	9
2. megarhynchus , <i>Des Murs</i> , p. 332.	,, 318 to 321	Des Murs, Castelnau's Voyage, Ois. p. 9, pl. 1.	4
3. wilsoni * (<i>Cass.</i>) . . . p. 333.	,, 321 322	Cassin, Journ. Ac. Philadelphia, 1847, p. 21, pl. 7.	○
Genus 14.	,, 312		
LEPTODON.	313		
Species			
1. cayennensis . . . (<i>Gmel.</i>), p. 333.	,, 322 to 329	Buffon, Pl. Enl. vol. i. pl. 473 (adult) ⁴ .	6
		Temminek, Pl. Col. pl. 204 (immature) ⁵ , and pl. 270 (immature) ⁶ . Lawrence and Sumichrast, Birds of S.W. Mexico, in Bull. of U. S. Mus. no. 4, p. 42 ⁷ .	

¹ Here referred to as *Henicopernis longicauda* in immature dress.

² The several species comprised in the genus *Regerhinus* are referred by Mr. Sharpe to that of *Leptodon*.

³ Here figured as "*Falco uncinatus*."

⁴ Figured under the name "Petit Autour de Cayenne."

⁵ Erroneously named "*Falco palliatus*."

⁶ Here called "*Falco cayennensis*."

⁷ The generic name "*Cymindis*" is here used.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 15.			
BAZA.	1880, 462		
Species	463		
1. <i>madagascariensis</i> .. (<i>Smith</i>), p. 353.	1869, 450 1880, 462	Milne-Edwards et Grandier, Ois. de Madagascar, vol. i. p. 68, vol. ii. pls. 19, 19A, 20, and 21.	2
	464 465		
2. <i>cuculoides</i> (<i>Swains.</i>), p. 354, pl. 11. fig. 2.	,, 462 to 464	Du Bocage, Orn. d'Angola, p. 534.	2
3. <i>verreauxi</i> (<i>Lafr.</i>) .. p. 354.	,, 462 to 464	Ayres, Ibis, 1859, p. 240 ; 1864, p. 356.	7
		Sharpe's Layard, p. 54.	
		Shelley, P. Z. S. 1881, p. 562.	
4. <i>subcristata</i> (<i>Gould</i>), p. 357.	,, 462 465	Gould, Birds of Australia, vol. i. pl. 25 ¹ .	6
5. <i>reinwardti</i> (<i>Mill. &</i> <i>Schley.</i>), p. 358 ² .	,, 462 465 to 469	Schlegel, Valk Vogels, pp. 40, 77, pl. 27. figs. 1, 2, and 3 ³ .	14
		Ramsay, Proc. Linn. Soc. of N. S. Wales, 1879, p. 246.	
		J. H. G. in Slater's paper on Birds from Duke-of-York Island &c., P. Z. S. 1879, p. 450.	
		Salvadori, Ibis, 1879, p. 318.	
		Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 26.	
		Sharpe, Journ. Linn. Soc., Zool. vol. xvi. p. 424.	

¹ Here figured under the name "*Lepidogenys subcristatus*."² See Appendix K.³ These figures represent specimens from Amboina.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
BAZA.			
Subspecies			
<i>a. gurneyi</i> ¹ , Ramsay . . . . .	.....	Ramsay, Journ. Linn. Soc., Zool. vol. xvi. p. 130.	○
		Tristram, Ibis, 1882, pp. 133, 141.	
		Salvadori, Orn. della Papu-	
		asia o delle Molucche, pt. 3, p. 506.	
Species			
6. <i>rufa</i> , Schleg., p. 360.	1880, 462	Schlegel, Valk Vogels, pp. 41, 78, pl. 27. fig. 4, and pl. 28. figs. 1, 2, 3.	5
		Wallace, Ibis, 1868, p. 18.	
		Salvadori, Orn. della Papu-	
		asia e delle Molucche, pt. 1, p. 30.	
7. <i>sumatrensis</i> (Laf.),	,, 462	Wallace, Ibis, 1868, p. 18 ² .	○
p. 357, pl. 11. fig. 1	463	Hume, Stray Feathers, vol. iii. p. 313.	
(juv.).	470	Hume and Davison, Stray	
	471	Feathers, vol. vi. p. 25.	
		J. H. G. Stray Feathers, vol. viii. p. 444.	
		Oates, Birds of British Bur-	
		mah, vol. ii. p. 209.	
8. <i>erythrothorax</i>	,, 462	Schlegel, Valk Vogels, pl.	4
Sharpe, p. 357, pl. 10.	469	26. fig. 4 ³ .	
fig. 2.	470	Sharpe, P. Z. S. 1873, p.	
	625.		
9. <i>magnirostris</i> , Gray,	,, 462	. . . . .	○
p. 356, pl. 10. fig. 1.	470		

¹ See Appendix K.

² Mr. Wallace here suggests that the *Baza* from Western Borneo, in the Leyden Museum, to which I have referred in my Notes as figured by Prof. Schlegel in the Valk Vogels, pl. 28. fig. 5, under the name of *Baza magnirostris*, may be an example of *B. sumatrensis*; but it appears to be considerably smaller, as Schlegel gives its wing-measurement as "11 pouces 6 lignes" (*vide* 'Revue de la Musée des Pays-Bas,' Aéolpitres, p. 136). This Bornean bird has not, as I think, been satisfactorily identified.

³ A male from the Soolo Islands here figured under the name "*Baza magnirostris*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
10. ceylonensis , Legge	1880, 462 470	Legge, Stray Feathers, vol. iv. p. 247. Legge, Birds of Ceylon, pp. 94 (pl.) & 1209. Hume, Stray Feathers, vol. vii. p. 151. J. H. G. Stray Feathers, vol. viii. p. 445.	3
11. lophotes (Temm.) . . . p. 352.	", 471 1882, 235	Temminck, Pl. Col. pl. 10 ¹ . Hume and Davison, Stray Feathers, vol. vi. p. 24. Bingham, Stray Feathers, vol. ix. p. 145.	5
		Legge, Birds of Ceylon, pp. 98, 1209. Oates, Birds of British Burmah, vol. ii. p. 208.	
Subfamily 13. <i>FALCONINÆ.</i>			
Genus 1. HARPAGUS.	1881, 118 119		
Species			
1. diodon (Temm.) . . . p. 361.	", 119 120	Temminck, Pl. Col. pl. 198. Pr. Maximilian, Beiträge, vol. iii. p. 138.	5
2. bidentatus (Lath.) . . p. 362.	", 120 to 123	Temminck, Pl. Col. pls. 38 & 228 ² .	16
		Pr. Maximilian, Beiträge, vol. iii. p. 132 ² .	
		D'Orbigny, Voyage, Ois. p. 122 ² .	
		Tschudi, Fauna Peruana, Orn. p. 107.	
3. fasciatus , Lawr. . . p. 363.	", 123 124	. . . . .	3

¹ Temminck refers this species, in accordance with his usual custom, to the genus *Fulco*.

² D'Orbigny uses for this species the generic name *Diodon*; Temminck and Prince Maximilian for this and the preceding species that of *Fulco*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 2.			
MICROHIERAX.	1881, 271		
Species			
1. fringillarius	,, 271	Horsfield, Zool. Researches in Java, pl. 35 ¹ .	14
(Drap.), p. 367.	273	Bingham and Davison, Stray Feathers, vol. v. p. 80.	
	274	Hume and Davison, Stray Feathers, vol. vi. p. 5.	
		Nicholson and Forbes, Ibis, 1881, p. 140.	
		Kelham, Ibis, 1881, p. 364.	
		Oates, Birds of British Bur-	
		mah, vol. ii. p. 212.	
2. latifrons , Sharpe . . .	,, 271	Sharpe, Ibis, 1879, p. 237,	3
	274	pl. 7.	
	275		
3. eutolmus ² (Hodgs.) .	,, 271	Hume, Stray Feathers, vol.	8
p. 366.	to 273	iii. p. 22.	
		Bingham, Stray Feathers,	
		vol. v. p. 80.	
		Hume, Stray Feathers, vol.	
		v. p. 127.	
		Hume and Davison, Stray	
		Feathers, vol. vi. p. 3.	
		Bingham, Stray Feathers,	
		vol. ix. p. 142.	
		Hume, Stray Feathers, vol.	
		x. p. 178, footnote ³ .	
		Oates, Birds of British Bur-	
		mah, vol. ii. p. 211.	

¹ There figured as "Falco cærulescens."

² Mr. Sharpe applies to this species the name of "cærulescens," in which he has been followed by some other authorities; I have explained in my Notes my reason for not using this specific name.

³ Mr. Hume here points out a probable error in the locality ascribed to one of the specimens mentioned in my Notes.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
4. erythrogenys (<i>Vig.</i>) p. 369.	1881, 271 273 274 ¹	Eydoux et Souleyet, Voy. de la Bonite, Atlas, Ois. vol. i. p. 71, pl. 1 (adult) ² . Fraser, Zool. Typ. pl. 31 (immature). Tweddle, Collected Works, pp. 514, 530, 629.	4
5. melanoleucus (<i>Blyth</i>), p. 368.	„ 271 272 274	Hume, Stray Feathers, vol. ii. p. 525.	○
6. sinensis , <i>Sharpe</i> ..	„ 271 274	Sharpe, Ibis, 1875, p. 254. David et Oustalet, Ois. de la Chinc, p. 30, pl. 8.	○
Genus 3.			
POLIOHIERAX.			
Species			
1. semitorquatus (<i>Smith</i>), p. 370.	„ 275	Smith, Ill. of Zoology of S. Africa, Aves, pl. 1 (adult male). Selater, Ibis, 1861, p. 346, pl. 12 (immature male) ³ . Selater, P. Z. S. 1864, p. 107.	2

¹ Since writing the Notes above referred to, I have, through the kindness of Captain Wardlaw Ramsay, had an opportunity of measuring some additional specimens of this species, with the following result:—

	Wing. in.	Tarsus. in.	Middle toe s. u. in.
Luzon, ♂	4	0.80	0.80
„ ♂	4.15	0.75	0.75
„ ♀	4.60	0.95	0.80
„ ♀	4.20	0.90	0.80
„ ♀	4.55	0.85	0.80
Zamboanga, ♂	4.55	0.85	0.80
„ ♀	4.55	0.90	0.85

The supposed male from Zamboanga was sexed by the collector, Mr. Everett; but in this instance I doubt the correctness of his diagnosis.

² Here figured under the title of "*Falco gironnieri*."

³ This plate is inscribed "*Hypotriorchis castanonotus*;" Sir A. Smith's "*Falco semitorquatus*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwiche Museum.
POLIOHIERAX.			
1. semitorquatus (<i>continued</i>).		Finsch and Hartlaub, Vögel Ost-Afrikas, p. 77. Andersson, Birds of Damara Land, p. 19. Sharpe's Layard, p. 55.	
2. insignis , Wald. p. 370.	1881 , 275 1882 , 457	Humo and Feilden, Stray Feathers, vol. iii. p. 19. Tweeddale in Rowley's Orn. Misc. vol. iii. p. 169, pl. 103. Humo and Davison, Stray Feathers, vol. vi. p. 2. Oates, Birds of British Burmah, vol. ii. p. 213.	4
Genus 4.			
SPIZIAPTERYX.			
Species			
1. circumcinctus (Kaup), p. 371.	1881 , 275 276 ¹	Selater, Ibis, 1862, p. 23, pl. 2. White, P. Z. S. 1882, p. p. 623.	O
Genus 5.			
DISSODACTES ² .	,, 277		
Species			
1. ardesiacus (Bonn. et Vieill.), p. 446.	,, 277 to 279	Fritsch, Vög. Eur. pl. 3. fig. 4. Sharpe's Layard, p. 67.	3

¹ I may add to my remarks on this scarce species that the collection of Messrs. Salvin and Godman now contains four examples, all from the Argentine Republic, and all marked as females by the collectors. I have had the opportunity of measuring these specimens, with the following results:—

	in.	in.
Wing	6.50	to 7
Tarsus	1.70	to 1.80
Middle toe, s. u.	1.10	to 1.25

² The several species forming the genus *Dissodectes* are included by Mr. Sharpe in the group to which he applies the generic name of "*Cerchnis*," and in this he is followed by Signor Barboza du Bocage; most other authors have placed them in the genus "*Falco*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. dickinsoni , <i>Sclat.</i> . . . p. 447.	1881 , 277 to 279	Du Bocage, <i>Orn. d'Angola</i> , p. 53. Böhm, <i>Journ. für Orn.</i> 1882, p. 205. Selater, <i>Ibis</i> , 1864, p. 305, pl. 8. Sharpe's Layard, p. 68. Du Bocage, <i>Orn. d'Angola</i> , p. 54. Shelley, <i>P. Z. S.</i> 1882, p. 302.	3
3. zoniventris (<i>Peters</i>). p. 447, pl. 14. fig. 2.	1869 , 446 1881 , 277 to 279	Milne-Edwards et Grandier, <i>Ois. de Madagascar</i> , vol. i. p. 35, and vol. ii. pl. 10.	2
Genus 6. HARPA.			
Species 1. novæ-zealandiæ . . . (<i>Gmel.</i>), p. 372.	1870 , 534 535 ¹ 1881 , 276 277	Buller, <i>Birds of N. Zealand</i> , p. 1, pl. ¹ Hutton, <i>Ibis</i> , 1879, p. 456. Buller, <i>Ibis</i> , 1881, p. 453.	1
Subspecies a. brunnea ² (<i>Gould</i>) . . . p. 373.	1870 , 534 535 ¹ 1881 , 277	Buller, <i>Birds of N. Zealand</i> , p. 6 ¹ .	5

¹ Here referred to the genus *Hieracidea*.

² Mr. Sharpe applies to this Falcon the specific name "australis," proposed by MM. Hombron and Jacquinot in the 'Annales des Sciences Naturelles,' 2nd series, vol. xvi. p. 312; but, according to the letterpress of the 'Voyage au Pôle Sud,' Zool. vol. iii. p. 47, this name was given to the species inhabiting the Auckland Islands as well as New Zealand, which is *H. novæ zealandiæ*. I therefore agree with Dr. Buller in considering "*Falco australis*" a synonym of the larger species, and I would designate the smaller, if it be really distinct, by Mr. Gould's specific name "brunnea." Mr. Sharpe, in the 'Ibis,' 1873, p. 327, objected to the use of the latter name as "being already pre-occupied by Bechstein, who thus called the Common Kestrel of Europe;" but I would submit that the fact of this specific name having been proposed for a species of the genus *Tinnunculus* does not render its employment illegitimate when it is applied to a bird belonging to another and distinct genus—that of *Harpa*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 7. HIERACIDEA.	1881 , 276		
Species			
1. orientalis (Schleg.) p. 422.	.....	Gould, Birds of Australia, vol. i. pl. 11.	3
2. berigora (Vig. et Horsf.), p. 421.	.....	Gould, Birds of Australia, vol. i. pl. 12 ¹ .	9
Genus 8. TINNUNCULUS.	1881 , 455 ²		
Species			
1. alaudarius (Gmel.) p. 425.	,, 456 to 464	Gatcombe, Zoologist, 1867, p. 702. Dresser, Birds of Europe, vol. vi. p. 113, pl. 384. Newton's Yarrell, vol. i. p. 78 ³ . J. H. Gurney, jun., Ramblos of a Naturalist, p. 137. Hume, Nests and Eggs of Indian Birds, p. 21 ⁴ . Seeböhm, British Birds, vol. i. p. 45. Oates, Birds of British Burmah, vol. ii. p. 217 ⁴ .	31 Skel. 2

¹ This species stands in Mr. Gould's work as "*Ieracidea occidentalis*," and the preceding one as "*Ieracidea berigora*," an error which has been pointed out and rectified by Mr. Sharpe in his article on the latter species.

A *Hieracidea* in the Norwich Museum, obtained by Mr. Goldie in South-eastern New Guinea, is an undoubted example of *H. berigora*; but Mr. Sharpe has also recorded the occurrence in New Guinea, at Port Moresby, of a specimen of *H. orientalis* (*vide Journ. Linn. Soc., Zoology*, vol. xiv. p. 627).

² I have given in my Notes the reasons, stated by Dr. Sclater and concurred in by myself, for using the generic name of *Tinnunculus* in preference to that of *Certhneis*, adopted by Mr. Sharpe. The Kestrels are referred by some authors to the genus *Falco*.

³ Professor Newton mentions a fact which I overlooked in discussing the southern limit of this species, viz. that the Leyden Museum contains a specimen "près à bord d'un vaisseau à la hauteur du Cap de Bonne Espérance" (*conf. Schlegel, Muséum des Pays-Bas, Falcones*, p. 26).

⁴ Some of Mr. Hume's notes here referred to probably relate to the darker race, *T. saturatus*; and this remark also applies to those of Mr. Oates.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subspecies			
a. <i>neglectus</i> ? (Schleg.) pp. 426, 428.	1881, 456 459 463 ¹	Schlegel, Revue Musée des Pays-Bas (1873), Accipitres, p. 43 ³ .	11
b. <i>saturatus</i> ?, Blyth. p. 426.	,, 456 to 465 ²	Blyth, Journ. As. Soc. of Bengal, vol. xxviii. p. 277. Blyth, Ibis, 1866, p. 238.	12
c. <i>japonicus</i> p. 426.	,, 456 457 460 to 462 464 465 547	Temminck and Schlegel, Fauna Japon., Aves, p. 2, pls. 1 & 1 b ³ .	19
Species			
2. <i>rupicolus</i> (Daud.) .. p. 429.	,, 465 466	Ayres, Ibis, 1859, p. 240. Andersson, Birds of Damara	15
		Land, p. 18. Sharpe, P. Z. S. 1874, p. 581, pl. 68. figs. 1 & 2 (adult and immature).	Skel. 1
		Sharpe's Layard, p. 62. Du Boceage, Orn. d'Angola, p. 49 ³ .	
3. <i>moluccensis</i> Hombr. et Jacq., p. 430.	,, 469	Schlegel, Valk Vogels, pp. 6, 47, pl. 1. figs. 3, 4, & 5 ³ . Sharpe, P. Z. S. 1874, p. 583.	13

¹ In November 1876 a very small Kestrel was killed in West Cornwall, which I think may have been a wandering example of *T. neglectus*; it was recorded by the late Mr. Rodd at p. 5178 of the 'Zoologist' for that year, and I have no further information respecting it than that which he there supplied.

² I have, in my Notes, applied to this species the name of "interstinctus"; but I now feel doubtful whether M'Clelland's "Falco interstinctus" was not founded on a female or young male of the ordinary *T. alaudarius*, and I have therefore here availed myself of Blyth's specific name of "saturatus," which appears to have been founded on a female of the darker race. Mr. Sharpe's views as to the subspecific races of *T. alaudarius* will be found in his Catalogue, under the head of that species.

³ Signor Du Boceage follows Mr. Sharpe in using the generic term of "Cerchnæus" in preference to that of "Tinnunculus." Professor Schlegel and Sir A. Smith have used that of "Falco."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
TINNUNCULUS.			
Species.			
4. rupicoloides (<i>Smith</i>), p. 432.	1868 , 142 1881 , 465	Smith, Ill. of Zool. of S. Africa, Aves, pl. 92 ¹ . Ayres, Ibis, 1869, p. 288. Andersson, Birds of Damara Land, p. 19. Sharpe's Layard, p. 63.	12
5. arthuri ² , <i>Gurn.</i> , n. s.	,, 124 457 462 ²	. . . . .	1
6. alopex (<i>Heugl.</i>) p. 432, pl. 14. fig. 1.	,, 466	Von Heuglin, Ibis, 1861, p. 69, pl. 3.	0
7. cenchoroides (<i>Vig. & Horsf.</i>), p. 431.	,, 469 470	Gould, Birds of Australia, vol. i. pl. 13.	8
8. punctatus (<i>Temm.</i>), p. 434.	1869 , 447 1881 , 468	Temminck, Pl. Col. pl. 45.	9
9. newtoni , <i>Gurn.</i> p. 433.	1863 , 34 to 36 pl. 2 1869 , 446 447 1881 , 466 to 468	Milne-Edwards et Grandier, Ois. de Madagascar, vol. i. p. 45, vol. ii. pls. 13, 13 ^A , 14, and 14 ^A .	11
10. gracilis (<i>Less.</i>) p. 435.	,, 468 469	Des Murs, Icon. Orn. pl. 25.	6
11. sparverius (<i>Linn.</i>), p. 437.	,, 547 to 554 1882 , 290 291	Audubon, Birds of America, pl. 142. Grayson, Memoirs of Boston Nat. Hist. Soc. vol. ii. p. 301.	24 Skel. 1

¹ See note 3 on page 97.² As to this previously undescribed species, see Appendix L, where I have given details respecting it; the specimen in the Norwich Museum is the type, and at present unique. In my Notes in the 'Ibis' for 1881 I did not separate it from *T. alaudarius*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subspecies			
a. cinnamomimus .. (<i>Swains.</i>), p. 439.	1881, 547 550 551 553 to 556	Pr. Maximilian, Beiträge, vol. iii. p. 116 ¹ . D'Orbigny, Voyage, Ois. p. 119 ¹ .	16
b. caribbæarum (<i>Gmel.</i>), p. 442 (foot-note) ² .	,, 547 551 556 to 561 ³ 1882, 291	Grisdale, Ibis, 1882, p. 491.	6
Species			
12. isabellinus (<i>Swains.</i>), p. 441.	1881, 547 548 561 to 563	Buffon, Pl. Enl. vol. i. pl. 444 ⁴ .	12
13. dominicensis (<i>Gmel.</i>) ² , pp. 439, 442.	,, 547 556 563 564	Brisson, Orn. vol. i. p. 389, pl. 32. fig. 2 ⁵ .	4

¹ Here called "*Falco sparverius*."

² Mr. Sharpe here suggests the identity of this subspecies with *T. leucophrys* of Ridgway; but, as explained in my Notes, I consider the latter to be a synonym of *T. dominicensis*, which Mr. Sharpe treats as distinct from *T. leucophrys*.

³ In my Notes above referred to ('Ibis,' 1881) I erroneously applied to *T. caribbæarum* the subspecific name of "antillarum," but I corrected this mistake subsequently ('Ibis,' 1882, p. 291). In the former Notes I gave the measurements of some specimens of this Kestrel, and I am now able to add those of four more, which have been subsequently acquired by the Norwich Museum, and one of which (that from Porto Rico) was liberally presented to that institution by Mr. George N. Lawrence, of New York.

	Wing.	Tarsus.	Middle toe s. u.
<i>Males.</i>	inches.	inch.	inch.
St. Lucia	6·20	1·30	0·90
St. Thomas	6·70	1·30	1·0
<i>Females.</i>			
St. Lucia	6·60	1·30	1·0
Porto Rico	7·30	1·30	1·25

⁴ This plate, entitled "Emerillon de Cayenne," was erroneously referred to, in my Notes, as no. 144 instead of 444.

⁵ Brisson calls this Kestrel "L'Emerillon de St. Domingue."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
TINNUNCULUS.			
Species			
14. sparverioides (<i>Vig.</i>), p. 443.	1881 , 565 to 567 ¹	D'Orbigny in de la Sagra's Nat. Hist. of Cuba, Ois. p. 30, pl. 1.	2
15. cenchris ² (<i>Naum.</i>), p. 435.	,, 470 472	Dresser, Birds of Europe, vol. vi. p. 125, pl. 385. Andersson, Birds of Damara Land, p. 17. J. H. Gurney, jun., Rambles of a Naturalist, p. 138. Sharpe's Layard, p. 64. Du Bocage, Orn. d'Angola, p. 51. B. O. U. List of British Birds, p. 104.	19
Subspecies			
a. pekinensis ? (<i>Swinh.</i>) ³ , p. 437.	,, 470 to 472	David et Oustalet, Ois. de la Chine, p. 35. Inglis and Hume, Stray Feathers, vol. ix. p. 242 ⁴ .	6
Subgenus A.			
ERYTHROPOUS ⁵ .	1882 , 146		
Species			
1. vespertinus (<i>Linn.</i>), p. 443.	,, 146 147 151	Stevenson, Birds of Norfolk, vol. i. p. 19 ⁶ . Newton's Yarrell, vol. i. p. 69. Dresser, Birds of Europe, vol. vi. p. 93, pl. 382.	15

¹ I have referred, in my Notes, to Dr. Gundlach's statement as to the interbreeding of *T. dominicensis* and *T. sparverioides*; it is perhaps possible that the latter may in reality be merely a partially melanistic race of the former.

² In my Notes on this species I have referred to the reasons for using the specific name of "cenchrus" rather than that of "naumannii" adopted by Mr. Sharpe; as to points of difference between this species and *T. pekinensis*, see Appendix M.

³ See Appendix M.

⁴ In this article Mr. Hume recognizes the identity of the bird for which he had previously proposed the specific name of "inglisi" with *T. pekinensis*.

⁵ This subgenus is included by Mr. Sharpe in the group to which he applies the generic term of "Certhneis;" Mr. Sharpe's example in this respect has been followed by Signor Du Bocage. Some other authors include *Erythropus* in the genus *Falco*.

⁶ Two of the Norfolk-killed specimens recorded by Mr. Stevenson are preserved in the Norwich Museum. This species is referred to by Mr. Stevenson under the name of "*Falco rufipes*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
2. amurensis (Radde), p. 445.	1868 , 41 to 43 pl. 2 ¹ 1869 , 446 1882 , 147 to 152 436 437	Andersson, Birds of Damara Land, p. 15. Sharpe's Layard, p. 65. Du Bocage, Orn. d'Angola, p. 52. Seebohm, British Birds, vol. i. p. 42.	20
Genus 9. HYPOTRIORCHIS ² .	Species ,, 152	Ayres, Ibis, 1868, p. 41; 1873, p. 280. Swinhoe, Ibis, 1874, pp. 425, 428. Sharpe's Layard, p. 66. Prjevalsky in Rowley's Orn. Misc. vol. ii. p. 151. David et Onstalet, Ois. de la Chine, p. 34. Legge, Birds of Ceylon, p. 119. Inglis and Hume, Stray Feathers, vol. ix. p. 243. Butler, Stray Feathers, vol. ix. p. 371. Shelley and Ayres, Ibis, 1882, p. 239.	
1. concolor (Temm.) . . p. 405.	1869 , 445 1882 , 157 158 437	Hemprich and Ehrenberg, Symbolæ Physicæ, Aves, pl. 19 ³ . Milne-Edwards et Granddier, Ois. de Madagascar, vol. i. p. 37, vol. ii. pls. 11, 12, and 12A.	3
2. leanoræ (Gené) . . p. 404.	1869 , 445 pl. 16 1882 , 153 to 157	Dresser, Birds of Europe, vol. vi. p. 103, pl. 383. Dixon, Ibis, 1882, p. 558.	5

¹ The figures here given are from specimens in the Norwich Museum.² The genus *Hypotriorchis* is amalgamated with that of *Falco* by Mr. Sharpe and by many other authors, including some to whose works I have here referred.³ Here figured (with the egg) under the name of "*Falco schistaceus*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
HYPOTRIORCHIS.	Species		
3. subbuteo (Linn.)	1868 , 142 1882 , 152	Newton's Yarrell, vol. i. p. 65. Dresser, Birds of Europe, vol. vi. p. 69, pl. 379. Andersson, Birds of Damara Land, p. 14. Sharpe's Layard, p. 59. Prjevalsky in Rowley's Orn. Misc. vol. ii. p. 150. David et Oustalet, Ois. de la Chine, p. 33. Du Boceage, Orn. d'Angola, p. 48. Seeböhm, British Birds, vol. i. p. 31.	20 Skel. 1
4. cuvieri (Smith)	1868 , 142 1882 , 152	Schlegel, Nederl. Tijds. vol. i. p. 123, pl. 5 ¹ . Sharpe's Layard, p. 59. Du Boceage, Orn. d'Angola, p. 534. Shelley, P. Z. S. 1881, p. 562; 1882, p. 304.	2
5. severus (Horsf.)	" 153	Schlegel, Valk Vogels, pp. 4, 45, pl. 2. figs. 2 & 3. Radcliffe, Faleoury, p. 15. Tweeddale, P. Z. S. 1878, p. 937. Selater, P. Z. S. 1880, p. 65. Sharpe, Journ. Linn. Soc. (Zool.) vol. xvi. p. 424. Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 33, and pt. 3, p. 507.	9²
6. religiosus? (Bon.),	" 153	Schlegel, Valk Vogels, pl. 2. fig. 6 ³ .	0

¹ Professor Schlegel here figured this species under the name "Falco boschii." I may mention that I am informed by Count Salvadori that he has received this Hobby from Schoa.

² One of these specimens was recently obtained from Jobie Island, and is, I believe, the first recorded from that locality; it was collected by Mr. A. A. Bruijn.

³ Although I saw the type specimen of *H. religiosus* at Leyden several years since, I

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
7. <i>lunulatus</i> (Lath.) p. 398.	1882, 131 153	Gould, Birds of Australia, vol. i. pl. 10 ¹ . Salvadori, Orn. della Papuasia e delle Molucche, pt. 1, p. 34, and pt. 3, p. 507.	10
8. <i>fusco-cærulescens</i> (Vieill.), pp. 400, 459.	,, 158 159	Temminck, Pl. Col. pl. 121 (immature), pl. 343 (adult). D'Orbigny, Voyage, Ois. p. 116. Grayson, Memoirs of Boston Nat. Hist. Soc. vol. ii. p. 301 ² .	6
9. <i>rufigularis</i> (Daud.) . . . p. 401.	,, 159 ³	Grayson, Memoirs of Boston Nat. Hist. Soc. vol. ii. p. 301. Elliot, Birds of North America, vol. ii. pl. 32. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 130. Lawrence and Sumichrast, Birds of S.W. Mexico, in Bull. U. S. Mus. no. 4, p. 39 ³ .	5
10. <i>deiroleucus</i> (Temm.), p. 402.	,, 159 ³	Temminck, Pl. Col. pl. 348. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 129.	1

unfortunately did not examine it with reference to its specific distinctness, and I am therefore unable to offer an opinion upon that disputed point. Professor Schlegel figures it under the name of "*Falco frontatus*, variété."

¹ Here figured under the name "*Falco frontatus*."

² In the different works to which I have here referred the specific name used for this Hobby is "*femoralis*."

³ I have given, in my Notes above referred to, my reasons for preferring the specific name of "*rufigularis*" to that of "*albigularis*," applied to this species by Mr. Sharpe, and also used by Mr. Lawrence: in the same page I have shown cause for applying to the next species the name of "*deiroleucus*" rather than that of "*aurantius*," adopted by Mr. Sharpe and also by the authors of the 'Land Birds of North America'; the latter name has been applied by some authors to *H. rufigularis*.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 10. ÆSALON ¹ .	1882 , 152 160		
Species			
1. regulus (Pall.) p. 406.	,, 160	Newton's Yarrell, vol. i. p. 74. Dresser, Birds of Europe, vol. vi. p. 83, pls. 380, 381. Radcliffe, Faleoury, p. 14. J. H. Gurney, jun., Rambles of a Naturalist, p. 137. Prjevalsky in Rowley's Orn. Misc. vol. ii. p. 151. David et Oustalet, Ois. de la Chine, p. 34. Seebold, British Birds, vol. i. p. 34.	21 Skel. 3
2. columbarius (Linn.) p. 408.	,, 160 161	Audubon, Birds of America, pls. 75 & 92 ² . Grayson, Memoirs of Boston Nat. Hist. Soc. vol. ii. p. 300.	13 Skel. 1
Subspecies			
a. richardsoni (Ridg.). pp. 408 (footnote), 460.	,, 161	Swainson and Richardson, Faun. Bor.-Amer. pt. 2, p. 37, pl. 25 (female) ³ . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 148 ⁴ .	4
b. suckleyi * (Ridg.) . . p. 460.	,, 161	Baird, Brewer, and Ridgway, Land Birds of N. Ameriea, vol. iii. p. 147 ⁴ .	0

¹ Included in the genus *Falco* by Mr. Sharpe and by various other authors; but some include it in *Hypotiorchis*, and others use the generic term *Lithofalco*.

² The old male of this species was figured by Audubon under the name of " *Falco temerarius*."

³ There figured under the name of " *Falco æsalon*."

⁴ The descriptions given of the males of *Æ. richardsoni* and of *Æ. suckleyi* lead me to doubt whether the fully adult male plumage of either race has yet been identified.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Genus 11.			
CHICQUERA¹.	1882 , 152		
Species	161		
1. typus , Bon. p. 403.	,,	161	Gould, Century, pl. 2 ² . Hume, Nests and Eggs of Indian Birds, p. 19. Radcliffe, Falconry, p. 13 ² .
2. ruficollis (Swains.) . . . p. 404.	1868 , 141	141	Swainson, Birds of West Africa, vol. i. p. 107,
	1882 , 161	161	pl. 2.
		162	Ayres, Ibis, 1869, p. 288.
Genus 12.			
FALCO.	,,	152	
Species			
1. peregrinator , Sund. . . . p. 382.	,,	292	Strickland, Annals of Nat. History, 1846, p. 102 ³ . Jerdon, Ill. of Indian Ornithology, pls. 12 & 28 ⁴ . Gould, Birds of Asia, pt. 3, pl. Radcliffe, Falconry, p. 6. J. H. G. Stray Feathers, vol. viii. p. 425. Legge, Birds of Ceylon, pp. 106, 1210.
Subspecies			
a. atriceps , Hume p. 377 ⁵ .	,,	291	Hume, Rough Notes, p. 58. Hume, Nests and Eggs of Indian Birds, p. 14. J. H. G. Stray Feathers, vol. viii. p. 423.
	to 293		1
	pl. 10		

¹ Included by Mr. Sharpe and many other authors in the genus *Falco*.

² Mr. Gould describes this species under the name of "*Falco chicquera*," and Col. Delmé Radcliffe under that of "*Lithofalco chicquera*."

³ This article contains Sundevall's original description, and is reproduced in 'Stray Feathers,' vol. v. p. 500.

⁴ Here figured under the name of "*Falco shahcen*."

⁵ Mr. Sharpe included *Falco atriceps* amongst the synonyms of "*F. communis*" (*percrinatus*); but I think there is no doubt that this is a mistake, as to which see my Notes above referred to.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
FALCO.			
Species			
2. <i>peregrinus</i>¹, Tunst. p. 376.	1861 , 131 1882 , 293	Schlegel, Valk Vogels, pl. i. fig. 1 ¹ .	54 Skel. 2
	to 300 ² 321 438 439	Newton's Yarrell, vol. i. p. 53. J. H. Gurney, jun., Rambles of a Naturalist, pp. 136, 286. Grayson, Memoirs Boston Soc. Nat. Hist. vol. ii. p. 300. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 132 ¹ . Dresser, Birds of Europe, vol. vi. p. 31, pl. 372. Radcliffe, Falconry, p. 5. Sharpe's Layard, p. 56. Seeböhm, British Birds, vol. i. p. 23.	
Subspecies			○
a. <i>pealei</i>, Ridg. , p. 459.	,,	297 298	Cassin, Birds of California &c. pl. 16 (hinder figure) ³ . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 137.

¹ Here referred to under the specific name of "*communis*," which was ultimately abandoned by Mr. Sharpe in favour of "*peregrinus*," as to which see my Notes.

² Subsequently to the publication of my remarks as to the frequent occurrence of Indian Peregrines in which the breast and abdomen are spotted instead of transversely barred, Captain Wardlaw Ramsay kindly lent me a similar English specimen, an adult male, killed at Willesden on December 31, 1868, in which the only portions of the under surface that are transversely barred are the under wing-coverts, the flanks, and, to a slight extent, the lower abdomen, the breast being speckled with small spots about one eighth of an inch long and about half as much across.

³ Here figured under the name of "*Falco polyagrus*," but erroneously, as I have been informed by Mr. Ridgway.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
<i>b. cassini</i> , Sharpe p. 384.	1882, 300 to 302 ¹	. . . . .	1
<i>c. melanogenys</i> , Gould p. 385.	,, 302 to 304 ²	Gould, Birds of Australia, vol. i. pl. 8. Schlegel, Valk Vogels, pl. i. fig. 2 ³ .	11
Species			
<i>3. minor</i> , Bon., p. 383, pl. 12.	,, 306 to 309	Sharpe's Layard, p. 57. Milne-Edwards et Grandier, 313 Ois. de Madagascar, 315 vol. i. p. 32.	6
Subspecies		437 ⁴	
<i>a. punicus</i> Levaill., jun., p. 386 ⁵ .	,, 307 309 to 311	Le Vaillant, Jeune, Exploration de l'Algérie, Ois. Skel. 1 pl. 1.	8

¹ I have recently measured an adult male of this rare Falcon from the Falkland Islands, kindly lent me by Captain Wardlaw Ramsay; the wing, though apparently quite perfect, only measures 12·15 inches, the tarsus 1·90, the middle toe s. u. 2·10; it is a remarkably dark-coloured specimen.

² By the kindness of Mr. Seehoem I have had the opportunity of examining a pair of Falcons (male and female), both killed on the 18th of March at Hui San, in Eastern China, which I consider to be adult examples of *F. melanogenys*, and the first, so far as I know, that have been recorded from China, or from any locality further north than the Philippine Islands. I understand that Hui San is in the vicinity of the river Yantze-kiang, and therefore about 32° N. lat. The Norwich Museum has lately acquired a typical adult male collected in Jobic Island by Mr. A. A. Bruijn.

³ A female from Java is here figured under the title of "*Falco communis*."

⁴ Subsequently to the publication of my Notes on *F. minor*, I had the opportunity of measuring two additional females of this species with the following results:—

	Wing. in.	Tarsus. in.	Middle toe s. u. in.
From Damara Land, marked female by the collector, the late C. J. Andersson, now in the possession of Capt. Wardlaw Ramsay	12·60	1·85	2·10
From the Rovuma River, in East Africa, in the collection of Capt. Shelley (<i>vide</i> P. Z. S. 1882, p. 302)	12·60	1·70	1·90

⁵ Mr. Sharpe includes *F. punicus* amongst the synonyms of "*F. barbarus*." Mr. Dresser figures it under the name of "*F. minor*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
FALCO.			
a. <i>punicus</i> (continued) ..	1882 , 313 to 321 437 ² 438	Dresser, Birds of Europe, vol. vi. p. 43, pl. 373 ¹ .	
Species			
4. <i>barbarus</i>, Linn. .. p. 386.	304 " 306	Salvin, Ibis, 1859, pl. 6. Dresser, Birds of Europe, vol. vi. p. 47, pl. 374.	5 Skel. 1
	311 312 315 437 438 579	Anderson, P. Z. S. 1876, pl. 23 ³ . Anderson and Gurney, P. Z. S. 1878, p. 2.	
5. <i>babylonicus</i>, Gurn.. p. 387 ⁴ .	439	Irby and Sclater, Ibis, 1861, p. 218, pl. 7.	3
		Gould, Birds of Asia, pt. 20, pl.	
		Radcliffe, Falconry, p. 8.	
		Jerdon, Ibis, 1871, p. 240.	

¹ See note 5 on page 107.

² Since my Notes on *F. punicus* were published I have been indebted to the kindness of Lord Lilford for the opportunity of examining two adult Falcons, both of which I think must be considered as females of *F. punicus*, though one is a trifle larger, and the other decidedly smaller than any other females of *F. punicus* that have come under my notice. The following are the principal dimensions of these two Falcons:—

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
From the island of Gianuti, near the coast of Tuscany	13·40	2·00	2·15
From Egypt (female by dissection)	12·60	1·90	1·95

I may add that Lord Lilford also possesses a wing of an immature male of *F. punicus*, taken from the nest on Madalena Island, off the coast of Sardinia, in May 1881, and accidentally killed in the following October, which measures 11·50 inches.

³ Here figured as "Falco babylonicus," which Mr. Anderson subsequently corrected.

⁴ Mr. Seebold, at page 30 of his work on 'British Birds,' refers to *F. babylonicus* as "probably the female" of *F. barbarus*; this surmise may, I think, be disproved by the following summary of measurements taken by myself from eleven adult or nearly adult specimens of *F. babylonicus*, presumably of both sexes:—

	in.	in.
Wing	12·50 to 13·30	
Tarsus	1·90 to 2·10	
Middle toe s. u.	1·95 to 2·10	

if compared with the following, taken from seven females of *F. barbarus*, the sex

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
6. feldeggii , Schleg. p. 389.	1882, 439 to 443	J. H. Gurney, jun., Rambles of a Naturalist, p. 133. Dresser, Birds of Europe, vol. vi. p. 51, pl. 375.	18
Subspecies a. tanypterus ? p. 391.	,, 439 to 443	Schlegel, Abhandlungen, pls. 12 & 13. Finsch, Trans. Zool. Soc. vol. vii. pp. 203, 204 ¹ .	8
Species 7. biarmicus , Temm. p. 391.	,, 442 443	Ayres, Ibis, 1860, p. 207; 1862, p. 154. Sharpe's Layard, p. 58, pl. 2.	18
Subgenus A. GENNAIA ² .	,, 152 443		
Species 1. juggur (Gray) p. 393.	,, 443 444	Gould, Birds of Asia, pt. 1, pl. Radcliffe, Falconry, p. 12. Hume, Nests and Eggs of Indian Birds, p. 16.	10 ³ Skel. 1

of five out of the seven having been verified by dissection (*vide* Ibis, 1882, pp. 312, 438):—

	in.	in.
Wing	11·10 to 12	
Tarsus	1·50 to 1·80	
Middle toe s. u.	1·70 to 1·80	

Added to which, *F. babylonicus* has never been detected anywhere to the west of the Asiatic continent, except in the case of a single supposed, but not very strongly authenticated, Abyssinian specimen in the Norwich Museum, whereas the chief stronghold of *F. barbarus* is Northern Africa, from Egypt to Morocco.

¹ The Falcon described at p. 204 of this article was doubtfully referred by Dr. Finsch to *F. barbarus*, and more positively by myself in the 'Proceedings of the Zoological Society' for 1871, p. 147. In this I was wrong; the bird is now in the collection of Capt. Wardlaw Ramsay, who has kindly allowed me to re-examine it, and I am satisfied that it is, in reality, a young male of *F. tanypterus*.

² Included by Mr. Sharpe and by many other authors in the genus *Falco*.

³ One of these specimens was obtained by Mr. Whitley, of Woolwich, who informed me that it and another example of this species (which I also saw) formed part of a collection of skins made by an artilleryman stationed at Tonghoo, a locality, which, if no mistake has occurred as regards these specimens, is, I believe, a new one for this species.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
GENNAIA.			
Species 2. saker (<i>Gmel.</i>) p. 417.	1882 , 443 to 447	Farman, Ibis, 1868, p. 409. Jerdon, Ibis, 1871, p. 238. Radcliffe, Falconry, p. 10. Henderson and Hume, Lahore to Yarkand, pt. 2, p. 171, pl. 1 ¹ . Dresser, Birds of Europe, vol. vi. p. 59, pls. 376, 377.	14
3. mexicana (<i>Schleg.</i>), p. 420.	,, 447 " to 451	Cassin, Birds of California &c. pl. 16 (front figure only) ² . Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 123 ³ . Coues, Birds of the North West, p. 339 ³ .	5

¹ This plate represents the type specimen of *F. hendersoni*, Hume (= *milvipes*, Hodgson), the supposed validity of which species, as distinct from *G. saker*, I have discussed in my Notes, and would here merely refer to what I have there written. Two of the specimens in the Norwich Museum, which are there catalogued under the head of *F. saker*, are in the plumage which has been separated under the specific titles of "*milvipes*" and "*hendersoni*," and a third specimen is partially in a similar dress.

² Here figured under the name of "*Falco polyagrus*;" as to the hinder figure on this plate, see Mr. Ridgway's letter quoted below.

³ This species is described in the 'Laud Birds of N. America' under the designation of "*Falco lanarius*, var. *polyagrus*," and in the 'Birds of the North West' under that of "*Falco mexicanus*, var. *polyagrus*." I avail myself of the kind permission of Mr. Ridgway to quote the following extract from a letter he was so good as to write me on 23rd January, 1883:—"Since I last wrote you I have had the pleasure of making a reexamination of the Falcon named '*Microfuleo lanarius*, var. *mexicanus*,' in my 'Catalogue of the Falconidae in the collection of the Boston Society of Natural History' (p. 44); very much to my surprise it proves to be nothing more than a small-sized young male of the ordinary *F. polyagrus*, differing in no respect except slightly smaller dimensions from examples in the National-Museum collection from Arizona and Lower California. . . . I have now no doubt whatever of the existence of only one species or race of this group in the Western United States and in Mexico, for which the name of *mexicanus* should be used. . . . Moreover, the original '*polyagrus*' of Cassin was a composite species, including, besides the *F. mexicanus*, the dark race of the Peregrine which, in 1873, I characterized as *Falco communis*, var. *pealei*; in fact part of Cassin's description and one of the figures of his plate are taken from the identical specimen which I afterwards made the type of my new race."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
4. hypoleuca (<i>Gould</i>), 1882, 451 p. 394.	452	Gould, Birds of Australia, vol. i. pl. 7.	3
5. subniger (<i>Gray</i>) . . . p. 394.	1870, 536 1882, 452	Gould, Birds of Australia, vol. i. pl. 9.	1
Subgenus B.	" 152		
HIEROFALCO¹ .	" 579		
Species			
1. labradorus (<i>Aud.</i>) . . . p. 416 ² .	" 579 to 581	Dresser, Rowley's Orn. Misc. vol. i. p. 185 (two plates).	1
2. gyrfalco (<i>Linn.</i>) . . . p. 416.	" 581 to 587	Newton and Wolley, Ootheca Wolleyana, p. 87, pl. C. Dresser, Birds of Europe, vol. vi. p. 15, pl. 367. Gould, Birds of Great Britain, vol. i. pl. 16. B. O. U. List of British Birds, p. 101.	14 ³
3. islandus (<i>Gmel.</i>) . . . p. 414.	" 587 to 591	Newton's Yarrell, p. 46. Wolf, Zool. Sketches, vol. i. pl. 35.	6 ⁴ Skel. 1
Subspecies			
a. holbælli ⁵ , <i>Sharpe</i> . . . p. 415, pl. 13.	" 587 to 591	Dresser, Birds of Europe, vol. vi. pl. 371 ⁶ .	13

¹ Both Professor Newton and Mr. Dresser refer the Falcons of this subgenus to the genus *Falco*.

² Included by Mr. Sharpe amongst the synonyms of *H. gyrfalco*.

³ Of these specimens ten are European and four North-American. As to the existence of this species on the North-American continent, see Appendix N.

⁴ One of these specimens (in immature plumage) was killed in Ross-shire.

⁵ For some additional remarks on *H. holbælli*, see Appendix N.

⁶ Here figured as "*Falco islandus*."

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
HIEROFALCO.			
Species			
4. candicans (<i>Gmel.</i>)	1882 , 591 p. 411.	Newton's Yarrell, p. 36. Dresser, Birds of Europe, vol. vi. p. 21, pls. 368, 369.	19¹
	to 594	Gould, Birds of Great Britain, vol. i. pls. 13, 14, and 15.	
		J. H. G. Zoologist, 1883, p. 80.	
		Saunders, Ibis, 1883, p. 350.	
Family 5.	1878 , 455		
PANDIONIDÆ.	1882 , 594		
Genus 1.			
PANDION.			
Species			
1. haliaëtus (<i>Linn.</i>) ²	,, 597 p. 449.	Newton's Yarrell, p. 30. Dresser, Birds of Europe, vol. vi. p. 139, pls. 386 & 387.	9 Skel. 1
	598	Seeböhm, British Birds, vol. i. p. 55 ² .	

¹ One of these specimens is an adult male killed at Beeston Regis, in Norfolk, in February 1848 (*vide* Stevenson's 'Birds of Norfolk,' vol. i. p. 8). This fine Falcon was presented to the Norwich Museum by Mr. Charles Hoare.

² Neither Professor Newton, Mr. Dresser, nor Mr. Seeböhm admit the subspecific distinctness of *P. carolinensis* and of *P. leucocephalus*; Mr. Sharpe admits the latter only. I have here separated the three races, though, as intimated in my Notes, I am not without considerable doubt as to the propriety of doing so.

Nomenclature, with references to Sharpe's Cat. vol. i.	References to J. H. G.'s Notes in the 'Ibis' (years and pages).	Miscellaneous References.	Number of specimens in Norwich Museum.
Subspecies <i>a. carolinensis?</i> (<i>Gmel.</i>), p. 449.	1882, 595 to 598	Audubon, Birds of America, pl. 81. Baird, Brewer, and Ridgway, Land Birds of N. America, vol. iii. p. 184.	9
<i>b. leucocephalus?</i> Gould, p. 451.	,, 595 to 598 ¹	Gould, Birds of Australia, vol. i. pl. 6. Schlegel, Valk Vogels, pp. 12, 52, pl. 3. fig. 3.	6

¹ Since the publication of my Notes I have had the opportunity of measuring some additional specimens of *Pandion leuecephalus*, with the following results:—

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
Gilolo, marked ♂ by collector	17.10	2.0	1.70
Mysol	16.90	2.0	1.60
North Ceram	17.0	2.0	1.60
Kirimoen Island, Timor Laut Group, marked ♀ by collector (<i>Mr. Forbes</i>)	16.75	2.0	1.70
Ternate (recently added to the collection in the Norwich Museum)	16.30	1.90	1.70
New-Britain Group, marked ♀ by collector (<i>Rev. G. Brown</i>)	17.80	2.0	1.80

APPENDIX A.

On Circus aeruginosus and Circus spilonotus.

MR. SEEBOHM, in the article on *Circus aeruginosus* in his 'History of British Birds,' has introduced some interesting remarks on the eastern range of that species, and on the geographical distribution of its Oriental congener *C. spilonotus*, also on the remarkable Harrier from Transylvania, figured in Dresser's 'Birds of Europe' as "a very old male" of *C. aeruginosus*. Mr. Seebohm speaks of this specimen as "evidently a nearly adult male" of *C. spilonotus*: this it possibly may be; but though it bears a singular resemblance to the male of *C. spilonotus* when passing from the immature to the adult dress, I have never seen an example of the latter species exactly like it, and I incline to the opinion that it really is an abnormally-coloured and probably a very old male of *C. aeruginosus*. I have seen other males, which I refer without doubt to *C. aeruginosus*, that considerably approach this Transylvanian specimen, but differ less than it does from the ordinary type of *C. aeruginosus*; of such specimens I may particularize five, four of which (one from Damietta, a second from Sahara, a third from Ceylon, and the fourth from Maunbhook in India) are in the Norwich Museum, and the fifth is Mr. Wright's Malta male referred to in Mr. Dresser's work.

The Norwich Museum has recently added to its series of *C. spilonotus* six specimens, all collected by Mr. Everett at Papar in Northern Borneo, which locality they had probably reached on their southern migration, as five of them were obtained at various dates ranging from the 24th December to the 4th January, and the sixth is also ticketed as obtained in December, though the day of the month has not in this instance been recorded.

According to the measurements which I subjoin there would appear to be amongst these specimens one female and five males, though of the latter two have been marked “♀” by the collector.

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
Five presumed males	15·45 to 15·90	3·50 to 3·80	1·75 to 1·90
One female	16·90	3·70	2·0

The males are entirely in the first year's plumage, except one, which has, to some extent, acquired the adult dress, especially as regards the quill-feathers and greater coverts of the wing, and also the tail, which is grey, with the exception of some remains of brown cross-barring.

The female and the four younger males all show more or less of the dark cross bars on the central rectrices; but in three of the males it is very indistinct, and in one of the three so effaced as to be almost indistinguishable; it is, however, clear to me that this is merely the effect of the feather becoming worn and faded as the season for moulting has approached. I greatly doubt a similar effect being ever produced in this species by the age of the bird, as suggested by Mr. Scobolin.

Immature specimens of *C. spilonotus* in which the dark cross bars have been removed by fading and attrition from the central rectrices cannot, in my opinion, be discriminated with certainty from immature specimens of *C. aeruginosus*.

APPENDIX B.

On some Species of the Genus Mierastur.

THE Norwiche Museum and the collection of Messrs. Salvin and Godman contain six examples of a *Micrastur* which resembles the greyer-backed adults of *M. guerilla*, but noticeably differs from these in having the jugulum suffused with rufous buff, extending over the transverse dark and pale bars, instead of these bars being either devoid of any such colouring or suffused with greyish brown with no tinge of fulvous or rufous, one or other of these alternative plumages always characterizing the adult of the true *M. guerilla*, from the greyer-backed examples of which this *Micrastur* does not otherwise differ. In two specimens of this fulvous-chested *Micrastur* which I have examined the mantle is decidedly grey, in one it is brownish grey, and in the remaining three it is grey mingled with brown, the latter tint appearing chiefly on the edges of the wing-coverts and of the lower scapulars.

The following are the localities and measurements of the specimens above alluded to:—

	Wing.	Tail.	Tarsus.	Outer toe s. u.	Middle toe s. u.	Inuer toe s. u.	Culmen s. c.
No. 1. Bahia. Coll. Salvin and Godman	in.	in.	in.	in.	in.	in.	in.
No. 2. Ditto. Ditto.....	6.90	6.60	2.40	0.70	1.15	0.70	0.60
No. 3. Venezuela. Norwich Museum	6.70	6.60	2.25	0.80	1.20	0.75	0.60
No. 4. U.S. Colombia. Do.	6.90	7.10	2.20	0.70	1.10	0.65	0.60
No. 5. "Brazil." Do.....	6.80	6.60	2.20	0.70	1.10	0.65	0.60
No. 6. "South America." Do.	6.80	6.70	2.20	0.80	1.25	0.75	0.65
	7.05	6.75	2.25	0.70	1.15	0.60	0.60

I have not been able to ascertain with certainty the immature plumage of this race of *Micrastur*; but I have seen specimens from Bahia, much resembling the young of *M. guerilla*, which I believe to be immature examples of the bird now under consideration.

Specimen No. 2 in the above list is one of those alluded to by Messrs. Sclater and Salvin in the P. Z. S. 1869, p. 367, as a specimen "not quite mature" of "*Micrastur leucauchen*;" but I am unable to accept this identification, as I am decidedly of opinion that Temminck's plate of the bird to which he gave the name of "*Falco leucauchen*" represents an immature example of *M. ruficollis*¹, and the present bird appears to me to be the adult stage of a species, or at least of a subspecies, distinct both from *M. ruficollis* and from *M. guerilla*.

Nos. 1 and 2 in my list have both been examined by Mr. Ridgway, who has ticketed them "*M. ruficollis*, grey phase, adult," and has described one of them as the "plumbeous" phase of that species at p. 492 of his very valuable monograph of the genus *Micrastur*, published in the 'Proceedings of the Academy of Natural Sciences of Philadelphia' for 1875. My objection to this solution is chiefly geographical, as I have never seen the typical *M. ruficollis* (regarded by Mr. Ridgway as the rufous phase of that species) from any locality further west than the island of Trinidad, whereas the bird which I am considering extends its range as far westward as the United States of Colombia.

I therefore look upon this race as a subspecies of *M. guerilla*; intermediate between that species and *M. ruficollis*; and as the coloration of the jugulum is the point of distinction between it and *M. guerilla*, I would propose for it the subspecific name "*jugularis*."

For comparison with the measurements given above I may quote the following, which I have taken from twenty-two

¹ In my Notes on *M. ruficollis* I expressed an opinion that this figure represented an "immature female" of that species; but I now believe that no difference of coloration exists between the sexes.

specimens of *M. guerilla* in the collection of Messrs. Salvin and Godman and in the Norwich Museum:—

	Wing.	Tail.	Tarsus.	Outer toe s. u.	Middle toe s. u.	Inner toe s. u.	Culmen s. c.
Two unsexed adults from Ecuador:	in.	in.	in.	in.	in.	in.	in.
From Pasto	6·60	6·00	2·30	0·75	1·10	0·70	0·70
From Nanegal	imperf.	imperf.	2·30	0·85	1·20	0·70	0·70
Two adults from Veragua, marked ♂ by collector	6·85 7·00	imperf. 6·60	2·40 2·25	0·80 0·80	1·25 1·15	0·80 0·75	0·60 0·65
Unsexed specimens from various localities extending from Panama to Mexico:							
Six adults	6·80 7·40 6·60	6·60 7·20 6·30	2·20 2·45 2·10	0·70 0·90 0·60	1·15 1·30 1·10	0·70 0·80 0·60	0·60
Twelve immature ..	to 7·25	to 6·90	to 2·40	to 0·85	to 1·30	to 0·80	to 0·65

For the sake of further comparison, I may add the following measurements, which I have taken from seven well-marked, but unsexed, specimens of *M. ruficollis*:—

Wing.	Tail.	Tarsus.	Outer toe s. u.	Middle toe s. u.	Inner toe s. u.	Culmen s. c.
in.	in.	in.	in.	in.	in.	in.
6·60	6·30	2·20	0·70	1·15	0·70	0·60
to	to	to	to	to	to	to
7·50	7·80	2·30	0·90	1·35	0·75	0·70

The immature plumage of *M. guerilla* is subject to considerable individual variation, some young birds showing a conspicuous white or yellowish-white nuchal collar, which in many others is more or less imperfect, and in a few almost imperceptible. The extent of the cross-barring on the underparts also varies greatly: in many specimens it extends over the whole under surface of the body, in others it is partially absent, and in a few almost entirely so; when present, the bars are always further apart than in the adult birds.

I may add, with reference to another allied species, *Micrastur zonothorax*, that I have only seen one adult specimen of this scarce Hawk. This example, which is in the collection of Messrs. Salvin and Godman, and was recorded in the P. Z. S. for 1873, p. 511, was obtained in Venezuela by Mr. Spence, and marked by him as a male; it differs from the normal adult plumage of *M. ruficollis* in the crown of the head, though tinged with brownish grey, being less distinct in that respect from the rufous colour of the mantle than is usual in *M. ruficollis*, also in the ochreolate-brown on the sides of the neck and on the throat being less rufous than in *M. ruficollis*, and especially in its being strictly limited to the throat, not descending to the jugulum or upper breast as in the adults of *M. ruficollis*.

Mr. Spence also obtained in Venezuela an immature specimen, which is probably referable to this species, and which is preserved in the collection of Messrs. Salvin and Godman; it bears a considerable resemblance to the immature plumage of *M. ruficollis*, but it is more strongly and more regularly barred on the under surface than is usual in the young birds of that species, and it is also, like the adult, browner and less rufous on the sides of the neck. The sex of this specimen has not been noted, but it would seem, from its measurements, to be a male.

Messrs. Salvin and Godman possess another very similar young bird, apparently also referable to *M. zonothorax*, from Porto Cabello in Venezuela, whence were obtained the type specimens of this species now preserved in the Museum of Berlin. This example chiefly differs from that last mentioned in the transverse bars on the under surface being narrower and in the interspaces being much tinged with yellowish buff, except where a few feathers of the adult plumage have appeared on the upper breast and show white interspaces between rather broad black cross bars. This specimen has been labelled by the collector as a female, obtained on 29th August, and having the irides "grey-brown."

The following are the measurements which I have taken from the last-named three specimens:—

	Wing.	Tail.	Tarsus.	Outer toe s. u.	Middle toe s. u.	Inner toe s. u.	Cul- men s. c.
♂ adult, Venezuela	in. 6·90	in. 6·50	in. 2·20	in. 0·80	in. 1·15	in. 0·70	in. 0·65
Immature, Venezuela	7·20	6·20	2·30	0·80	1·20	0·70	0·65
♀ immature, Porto Cabello	7·70	7·80	2·40	0·80	1·30	0·90	0·75

I am desirous of adding a few remarks on “*Sparvius gilvicollis*” of Vieillot, “*Nisus concentricus*” of Lesson, and “*Micrastur pelzelni*” of Ridgway.

Messrs. Salvin and Godman, in the P. Z. S. for 1869, p. 368, have, on the authority of Pueheran, admitted the identity of the two first (*conf. Rev. et Mag. de Zoologie*, 1850, p. 91). It seems to me that Pueheran was probably correct in this identification, that “*Nisus concentricus*” of Lesson is founded on the immature or partially immature plumage of the same species as that which, in its fully adult dress, received from Vieillot the designation of “*Sparvius gilvicollis*,” and that in this adult stage it is not separable from *Micrastur pelzelni* of Ridgway.

Mr. Ridgway, in his monograph of the genus *Micrastur*, to which I have already referred, writes thus under the head of *M. pelzelni* :—“In abbreviated tail it is like *M. concentricus* . . . but it differs very essentially in the relative length of the lateral toes, the outer one being decidedly longer than the inner, instead of being barely equal to it or appreciably shorter, while the barred crissum and under wing-coverts distinguish it at a glance from that species.” And again, writing of *M. concentricus*, he remarks :—“This very distinct species may be immediately distinguished by the peculiar proportions of the lateral toes and by having the tail shorter than the wing; while in its adult dress it is unique in the white throat and unbarred crissum and anal region, as well as by the yellowish instead of dusky colour of the bill, though we are not sure of the constancy of the latter feature.”

My own belief is that all these peculiarities of colouring indicate immaturity rather than the reverse, except perhaps the white throat, which, as also the slight differences in the

proportion of the toes, I believe to be due to individual variation.

I annex particulars of the measurements and markings of seventeen specimens which I have examined; and in the result I have to express my belief that the specific names "*concentricus*" and "*pelzelni*" must both sink into synonyms of *M. gilivcollis* :—

	Wing.	Tail.	Tarsus.	Outer toe s. u.	Middle toe s. u.	Inner toe s. u.	Cul- men s. c.
	in.	in.	in.	in.	in.	in.	in.
No. 1. ♂ ¹ . Sarayacu, Upper Ucayali. Type of <i>M. pelzelni</i>	6·50	6·00	2·20	0·85	1·20	0·70	0·60
No. 2. ♂. Camacusa, British Guiana	7·15	6·45	2·30	0·80	1·20	0·75	0·65
No. 3. ♂. Camacusa, British Guiana	6·50	6·00	2·30	0·80	1·20	0·75	0·60
No. 4. ♂. Camacusa, British Guiana (probably wrongly sexed)	7·80	6·50	2·30	0·80	1·10	0·80	0·60
No. 5. ♂. Camacusa, British Guiana	7·30	6·15	2·30	0·75	1·10	0·80	0·70
No. 6. ♂. Bartica Grove, British Guiana	7·30	6·30	2·30	0·75	1·10	0·70	0·65
No. 7. ♀. Bartica Grove, British Guiana	7·95	6·70	2·30	0·80	1·10	0·80	0·70
No. 8. ♀. Camacusa, British Guiana (probably wrongly sexed)	7·30	6·50	2·30	0·75	1·10	0·70	0·65
No. 9. ♀. Yquitos, Upper Amazons	7·40	6·70	2·45	0·80	1·20	0·75	0·75
No. 10. Yquitos, Upper Amazons	7·40	imperf.	2·40	0·75	1·20	0·75	0·70
No. 11. Brazil (?)	7·70	6·15	2·30	0·75	1·20	0·70	0·65
No. 12. Brazil (?)	7·50	6·30	2·30	0·85	imperf.	0·75	0·65
No. 13. Cayenne	7·90	6·20	2·20	0·70	1·05	0·70	0·65
No. 14. Demerara, British Guiana	7·50	6·50	2·20	0·80	1·10	0·70	0·65
No. 15. Sarayacu, Ecuador	7·90	6·70	2·35	0·85	1·30	0·75	0·70
No. 16. Sarayacu, Ecuador	7·80	6·30	2·40	0·80	1·30	0·80	0·75
No. 17. Sarayacu, Ecuador	8·00	6·35	2·45	0·80	1·25	0·80	0·75

It seems to me that the differences in measurement between the seventeen specimens whose dimensions are given above

¹ The sexes, where noted, have been so marked by the collectors. The majority of these specimens are in the collection of Messrs. Salvin and Godman, and the remainder in the Norwich Museum.

are not greater than may reasonably be accounted for either by difference of sex or by individual variation. The markings and coloration of these specimens I will now endeavour succinctly to describe, and I think that they bear out the conclusion which I have already indicated.

No. 1. *Adult male, Surayacu, Upper Ucayali, type of M. pelzelni* (shot 2nd August).—Entire upper surface plumbeous, tinged with brown on the lower scapulars, wings, wing-coverts, and tail, which latter has two narrow and somewhat indistinct whitish cross bars with a similar tip; cheeks and ear-coverts a lighter plumbeous; a similar but still paler tint on the chin, throat, and jugulum; from thence to the extremity of the under tail-coverts the whole under surface, including the under wing-coverts and axillaries, regularly cross-barred with alternate bands of black and white; on the upper breast the depth of these bands is about equal, but from thence downwards that of the black decreases and the white increases, till, on the under tail-coverts, the black bands are mere lines about a quarter of an inch apart; the bill is black, but the base of the lower mandible and that of the upper, along the tomia, is a yellow horn-colour.

No. 2. *Adult male, British Guiana* (shot 22nd April).—Only differs from No. 1 in having the black bars on the abdomen and under tail-coverts somewhat more strongly marked.

No. 3. *Adult male, British Guiana* (shot 17th June).—Closely resembles No. 1, from which it only differs in the inner lower portion of the under wing-coverts being immaculate, and in having three pale cross bars on the tail besides the tip.

No. 4. *Adult male (unless wrongly sexed), British Guiana* (shot 21st February).—This specimen is a clear plumbeous on the upper parts, with no tinge of brown, but the tail blackish, with two narrow transverse bands and the tip pure white and well defined; it has the dark cross bars on the breast and abdomen broader than in No. 1, and on the upper breast broader than the white bars; the under tail-coverts are white, spotted with plumbeous, some of the spots

taking the form of very imperfect bars; in other respects it agrees with No. 1.

No. 5. *Male, not fully adult, British Guiana* (shot 10th August).—The upper surface of this specimen agrees with that of No. 4, except that the tail has three white bars beside the tip; the under surface appears to me to indicate the remains of immaturity, the white portions of the plumage being everywhere more or less tinged with buff, except the throat, which is pure white; the dark cross bars are very narrow, and the buffy-white interspaces the reverse, being from '10 to '20 of an inch in depth; the cross-barring does not extend below the breast, except very slightly on the outer tibial feathers, and it does not exist on the under wing-coverts, except very slightly towards the edge of the wing; the axillaries are pure white. In this specimen there is a slight indication of the remains of a white nuchal collar below the ear-covert on one side; the entire lower mandible is yellow, and this colour extends on the upper mandible to the point, as well as along the tomia.

No. 6. *Male adult, British Guiana* (shot 6th October).—This specimen has the following particulars attached to it by the collector:—"Bill slate-colour, marked with yellow-ochre at base; eye white; cere, legs, and toes orange; claws brown." The upper surface agrees with No. 4, except that the throat instead of being plumbeous is white, as in No. 5, and the dark cross bars on the upper breast are not wider than the white interspaces; the wing-linings and axillaries are less strongly cross-barred than in No. 4, the former resembling those of No. 3.

No. 7. *Female adult, British Guiana* (shot 25th November).—From the same locality as No. 6, which it closely resembles; but the dark cross bars on the under tail-coverts are much more strongly marked; it has the following particulars attached to it by the collector:—"Eye white; bill bluish black; lower (mandible) greenish yellow; cere blood-orange colour; legs and toes orange-yellow; claws horn-colour."

No. 8. *Female (unless wrongly sexed) in change, British Guiana* (shot 9th April).—This specimen has a decided tint

of brown on all the upper parts, except the nape, where adult plumbeous feathers have appeared; but on one side of the neck there are conspicuous remains of a white nuchal collar; the tail has three imperfect transverse white bars besides the tip; the upper breast, some portions of the lower and of the abdomen, and also the tibiae, have acquired the adult plumage, and resemble those parts in No. 1; but on the remainder of the breast and abdomen, and also on the flanks, the immature plumage is retained; while the dark cross bars are narrower and at a much greater distance from each other than in the adult dress, the light interspaces being more or less tinged with buff; the under wing-coverts and axillaries seem to be in the adult state, and resemble those of No. 1.

No. 9. *Female, nearly adult, Yquitos, Upper Amazons* (shot 13th June).—This specimen is marked by the collector as having the “eye pinkish brown;” and its being this colour rather than white, as in Nos. 5 and 6, may be an indication of immaturity, to which I also attribute a slight buffy tint pervading the light portions of the breast and abdomen; the centre of the abdomen is free from cross bars, but these are strongly marked on the tibiae and under tail-coverts; the under wing-coverts are imperfectly cross-barred, and there are three white cross bars on the tail. With the exceptions here noted, it agrees with No. 1.

No. 10. *A younger bird from the same locality* (shot 21st October).—This bird is slightly browner on the upper parts than the preceding, and the two white bars on the tail are not quite so narrow; the throat is greyish white; adult cross-barred feathers have appeared on the jugulum and breast, also very slightly on the flanks, tibiae, and outer portion of the lower under wing-coverts; the upper mandible is slightly tipped with horn-colour; with these exceptions all the under surface is white, slightly tinged with buff.

Nos. 11 and 12. *Adults, said to be from Brazil*.—Both these specimens agree with No. 1, except that the under wing-coverts are only partially cross-barred, and that there are no transverse bars on the under tail-coverts.

No. 13. *An immature bird from Cayenne*.—Very similar

to No. 10, but the adult cross-barred feathers occupy a larger portion of the breast; the bill is coloured as in No. 5; there are three white cross bars on the tail, besides the tip.

No. 14. *Immature in change, British Guiana.*—Very similar to No. 10, but with only two white cross bars on the tail. This specimen, and also Nos. 10, 11, 15, and 16 (all more or less in immature plumage), agrees with No. 5 in having a white mark below the ear-coverts; but in these specimens this remnant of a nuchal collar is much smaller than in the immature bird No. 8.

No. 15. *Immature, Sarayacu, East Ecuador*¹ (shot in February).—The entire upper surface dark brown, blackish on the crown of the head; the tail with three white bars besides the tip; bill as in No. 10; undersurface as in No. 5, but with the cross bars on the upper breast somewhat broken and not fully developed. This specimen has the peculiarity of a plumbeous gorget, about 20 of an inch in depth, across the jugulum.

No. 16. *Immature, Sarayacu, East Ecuador.*—Similar to No. 15, but with the cross bars on the breast much more strongly and regularly marked, and no gorget across the jugulum.

No. 17. *Adult, Sarayacu, East Ecuador* (shot in February).—This specimen only differs from No. 1 in having the centre of the abdomen free from cross bars, and but a very slight indication of them on the under tail-coverts.

It is worthy of remark that D'Orbigny, who states that he met with this species in Bolivia (*vide 'Voyage,' Oiseaux*, p. 88), describes the colour of the iris as a clear yellow.

¹ Not the same as the locality of the like name where the type of *M. pelzelni* was obtained.

APPENDIX C.

On Urospizias dampieri, U. etorques, and U. misoricnisis.

Two specimens of *Urospizias dampieri*, which, so far as I know, were the first sent to Europe, formed part of a collection of birds thus described by Dr. Sclater in the P. Z. S. for 1877, p. 96 :—"Birds collected by Mr. George Brown, C.M.Z.S., in Duke-of-York Island and on the adjoining parts of New Ireland and New Britain." In this paper (at p. 109) Dr. Sclater, referring to these two Hawks under the title of "*Accipiter etorques*," wrote thus respecting them :—"An adult and a young specimen, apparently of this new species, are in the collection, but without exact locality."

These two specimens passed into the possession of the late Lord Tweeddale, and are now in that of Capt. R. G. Wardlaw Ramsay, who has kindly permitted me to examine them ; they appear to me by their measurements to be both males, the adult bird being certainly referable to *Urospizias dampieri*, and, in my opinion, the immature specimen also, though it has been suggested by Count Salvadori that the latter is a young *Leucospizias poliocephalus* in a rufous phase of plumage (*vide* Orn. della Papuasia e delle Molucche, pt. 1, pp. 45, 47).

The following are the measurements of these specimens, which may be compared with those that I have recorded in the 'Ibis' for 1882, p. 128 :—

Presumed males.	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
Adult (bearing Mr. Brown's mark "No. 62")	8·50	2·20	1·30
Immature (ditto ditto "No. 66")	8·20	2·20	1·30

It may be useful to add the following details of their

coloration, especially as the younger bird has not been described, except in Count Salvadori's article above referred to. Commencing with the latter, the crown of the head is dark rufous, with somewhat paler edges to the feathers, which have also white bases, partially apparent; on the centre of the vertex some slate-coloured feathers of the next plumage have appeared, which are a little darker than the corresponding feathers in the adult male; the feathers above and below the eye and upon the cheeks are yellowish white, with minute blackish-brown centres; the nuchal collar is black, but with partially apparent white bases to the feathers; on the sides of the neck the feathers are dark brown, with inconspicuous yellowish-white edges; the interscapular feathers are yellowish white, but each feather bears a dark brown shaft-mark and cross bar and a broad rufous-brown tip; the remainder of the mantle is rich rufous, with concealed yellowish-white bases to the feathers of the wing-coverts (as also to the quill-feathers of the wings), but this rufous colour is tinged with blackish on and adjoining the shafts of the feathers, the inner webs of which, except on the least wing-coverts, are of a pale rufous, save at the tips, and are transversely barred with blackish brown; the tail is rufous, cross-barred with brown, indistinctly on the central pair of rectrices, but very distinctly on the inner webs of the others, six bars being perceptible on the central and eight on the external rectrices; the entire underparts are yellowish white, sparsely variegated with longitudinal and partially sagittate brown markings, except on the under wing-coverts, which are immaculate.

In the accompanying adult specimen the entire upper surface is slaty grey, but this is paler on the head, nape, and cheeks than it is elsewhere; the tail is a uniform slaty grey, with the exception of slight traces of cross bars on the inner webs of some of the lateral rectrices; on the under surface the tail is brownish grey, but all the other underparts are vinous, that hue being palest on the throat, and disposed in bars of two shades, a paler and a darker alternately, on the wing-livings, axillaries, and crissum, also, indistinctly, on the abdomen and thighs.

Another adult male recently added to the collection at the British Museum is considerably smaller than that above described, and also than the male previously in the Museum, of which I gave the dimensions in the 'Ibis' for 1882, p. 128; this specimen measures as under:—

	in.
Wing	7·90
Tarsus	1·80
Middle toe s. u.	1·35

It was obtained from the Museum Godeffroy, having been collected in New Britain by Mr. Kleinsehmidt. Another Hawk from the same locality, and obtained by the same collector, was sent with it to the British Museum as an immature female of *U. dampieri*; but, in my opinion, it is a male of *U. torquatus* in the dress assumed by that species in its passage from the immature to the fully adult plumage.

One of the three adult females of *U. dampieri* collected by Lieut. Richards and described by me, under the erroneous appellation of *U. etorques*, in the 'Ibis' for 1882, p. 126, was acquired by the Norwich Museum, which has subsequently obtained a second specimen, also collected in New Britain and marked "♀" by the collector. This female closely resembles those obtained by Lieut. Richards; it has no cross bars on any of the rectrices except the two outer pairs, and these appear to belong to the immature dress, the entire remainder of the plumage being adult; this specimen measures:—

	in.
Wing	9·15
Tarsus	2·40
Middle toe s. u.	1·40
Culmen without cere	0·85

Another recent acquisition of the Norwich Museum is a second specimen of *Urospizias etorques*, collected by Mr. A. A. Bruijn, of Ternate, in Jobie Island, and marked by him as a female.

This specimen is very similar to the female from the Astrolabe Mountains, previously possessed by the Norwich

Museum and described in the 'Ibis' for 1882, pp. 453, 454, the only differences of marking which I observe between them being on the rectrices and under wing-coverts. In the Jobie Island bird the number of dark cross bars on the central rectrices is eleven, and they are somewhat more distinct than the corresponding bars in the Astrolabe specimen, which are only nine in number; the subterminal bar is rather narrower in the Jobie Island female than in that from the Astrolabe range. In both specimens all the rectrices are transversely barred, but the exterior pair on the inner web only. It may be well to note that a new and partly-grown rectrix in the Jobie Island bird shows the cross bars as strongly marked as they are on the older rectrices.

In both specimens the under wing-coverts exhibit transverse bars of the same alternate tints as those on the breast, these being, however, more distinctly marked in the Astrolabe specimen than in that from Jobie Island.

In both specimens the throat and chin are transversely barred with alternate narrow bands of grey and pale fulvous brown.

The Jobie Island female of *U. etorques* is slightly smaller than that from the Astrolabe Mountains, of which I recorded the dimensions in the 'Ibis,' 1882 (*loc. cit.*); it measures:—

	in.
Wing	9.90
Tarsus	2.40
Middle toe s. u.	1.70
Culmen without cere	0.90

A much smaller Hawk, also collected by Mr. Bruijn in the island of Jobie, and ticketed by him as a female, was added to the collection in the Norwich Museum at the same time as the Jobie example of *U. etorques*. This Hawk, which is nearly adult, is, if I mistake not, an example of *U. misoriensis*, a species which I believe had been previously met with only in the island of Misori (or Mysore); but as this island and that of Jobie are both situated in Geelvink Bay, there is no improbability in this species being found in Jobie as well as in Misori.

This specimen measures as under :—

	in.
Wing	7.95
Tarsus	2.40
Middle toe <i>s. u.</i>	1.40
Culmen without cere	0.70

The upper surface is of a clear bluish grey, palest on the sides of the head and darkest on the primaries, where the grey of the mantle passes into deep slaty brown. This grey tint is evidently that of the adult dress, some immature feathers which remain amongst the primaries, secondaries, and wing-coverts being of a much browner hue. In the immature plumage, but not in the adult, the primaries and the secondaries exhibit dark cross bars on the inner web; these exist throughout the whole length of the secondaries and on the basal portion of the primaries above the emargination; the interspaces in the latter, and to a slighter extent in the former, are tinged with pale fulvous brown.

All the rectrices, except the two external pairs, belong to the adult plumage, and are a pale grey, the central pair being entirely free from bars and the others cross-barred on the inner web only, and that somewhat indistinctly; the four external rectrices, which remain from the immature dress, are brown, with distinct darker transverse bars on both webs.

The throat is very indistinctly cross-barred with pale fulvous, alternating with grey and with white, the latter predominating; the remainder of the under surface of the body, and also the under wing-coverts, is of an unbroken vinous tint, only varied by slight and indistinct darker cross bars on the basal portion of the feathers of the upper breast and by similar but more distinct markings on the lowest feathers of the under wing-coverts, the latter appearing to be the remains of the immature dress; also by some remains of immature plumage along the central portion of the abdomen, consisting of several white feathers with longitudinal central brown marks more or less sagittate in form, the actual shaft of these feathers being tinged with vinous.

APPENDIX D.

On the Spotted Eagles obtained in Cornwall and Ireland.

I HAVE stated in my Notes that after examining the two Spotted Eagles killed in Cornwall, I considered that they belonged to the larger race (*Aquila clanga*) ; Mr. Seebohm, in his work on British Birds, p. 107, suggests, on the contrary, that probably both these birds, and certainly the one which is preserved in the Truro Museum, are, in reality, examples of the smaller race (*A. pomarina*).

With reference to this suggestion, I wish to observe that neither of these birds has the fulvous nuchal patch peculiar to the immature *A. pomarina* : the Truro specimen is certainly without it, and the late Mr. Rodd assured me that it was also absent, as it appeared to me to be, in the other Cornish specimen, which was in his possession when I saw it ; and although this bird was so faded as only partially to show the back of the neck, I think that I should have been able to detect the nuchal patch had it been present, and that I should not have failed to do so.

I may add that Mr. A. G. More, who, at my request, has very kindly examined the Irish-killed Spotted Eagle in the Museum of Trinity College, Dublin, informs me that in that specimen there is also "no trace of a fulvous nuchal patch."

As these three specimens are all immature, I believe the absence of a nuchal patch is a sufficient justification for referring them to *A. clanga*, although, if this identification be correct, they are small individuals of that larger race, but I think not so small as to be necessarily excluded from it.

Mr. Seebohm refers to a statement of mine as to the apparent length of the wing in the Truro specimen ; but it is fair to add that my figure, which he quotes, was only an estimate made through the glass of the unopened case containing the bird, and therefore much less reliable than an actual measurement.

APPENDIX E.

On the Species of the Genus Buteo found in Asia.

MR. SHARPE cites *Buteo leucocephalus* of Hodgson and *B. aquilinus*, also of Hodgson, as synonyms of *B. ferox*; but the bird described by Hodgson under the first of these names in the P. Z. S. for 1845, p. 37, which was "caught beyond the snows of Thibet," appears to me to belong, without doubt, to the same species as that for which Temminck and Schlegel proposed the specific name of *hemilasius*, founded on a Japanese specimen, in 1850 (*vide* 'Fauna Japonica,' Aves, p. 18, pl. 7). I therefore now adopt "*leucocephalus*" as the oldest specific name of this Buzzard, instead of that of *hemilasius* employed in my Notes.

Hodgson applied the specific name of *aquilinus* to the same species subsequently to that of *leucocephalus*¹, and called it "*Buteo leucocephalus* vel *aquilinus*," in a paper "On the Buzzards of the Himalaya and Thibet," published in the 'Caleutta Journal of Natural History,' vol. viii. p. 94, where he again alludes to it as brought "from Thibet." This locality was that of the type specimen of Hodgson's *B. leucocephalus*, but not of the type of his *B. aquilinus*, which latter,

¹ Mr. Hume writes to the following effect in 'Stray Feathers,' vol. iv. p. 359 (footnote):—"It is impossible to say whether *aquilinus*, or Hodgson's other name *leucocephalus*, should stand; the latter was read at the Zoological Society on the 8th April, 1845, but when the record of this reading was published I cannot ascertain: *aquilinus* appeared in the J. A. S. B. for 1st April, 1845, but when this actually appeared is doubtful; the numbers were often months in arrear." The species was, however, noticed, under the title of "*Butaquila leucocephala*," in the list of Nipalese Birds collected by Mr. Hodgson, at p. 81 of the volume for 1844 of J. E. Gray's 'Zoological Miscellany'; and although no description of the bird is there given, I think the fact of its record in 1844 under the specific title of "*leucocephala*" points to that being its older and original designation.

now preserved in the British Museum, was obtained by him in Nepal. This last-mentioned example, which appears to me to be identieal with *B. leucocephalus*, has been deseribed in Mr. Sharpe's Catalogue (p. 178) as a "very old" example of *Buteo ferox*, under which name it is also figured at pl. 8 of the same volume¹—but unfortunately somewhat incorrectly, the bare portion of the front of the tarsus being represented as scutellated quite aerooss, whereas it is, in fact, entirely eovered with reticulated scales. I have never examined an example of *B. leucocephalus* in which this reticulation did not exist; and I can vouch for its presence not only in the specimen above referred to, but in six others preserved in the British, Paris, and Norwicheh Museums.

The reticulation of this portion of the tarsus is, however, composed of larger scales in some individuals than in others.

This reticulation was thus deseribed by Hodgson in the P. Z. S. 1845, p. 37—"Tarse two thirds plumed in front, and the nude part reticulate, not scutellate;" and thus by the authors of the 'Fauna Japoniea' (Aves), in their article already referred to—"Les parties nues du tars inférieur du tarse sont revêtues . . . d'écailles passablement larges, particulièremment vers le devant, où elles prennent la forme de petites plaques disposées en réseau."

This "réseau" (network) on the front of the lower part of the tarsus is well shown in Mr. Wolf's excellent figure at pl. 7 of the 'Fauna Japoniea,' and also in the plate of this species in David and Oustalet's 'Oiseaux de la Chine.'

Mr. Hume, in 'Stray Feathers,' vol. iv. p. 367, adverting to the curious faet that in some, though comparatively few, specimens of *Buteo ferox* the front of the tarsus exhibits more or less of an abnormal reticulation of a charaeter similar to that which appears to be eonstant in *B. leucocephalus*, remarks, "Although in several specimens of *ferox* the scutation makes a decided approach to that of my speeimen of *aquilinus*, in no

¹ This plate has been rightly referred to *Buteo leucocephalus* (= *hemilasius*) by MM. David and Oustalet in the 'Ois. de la Chine,' p. 19; these authors use, however, for this species the specific name of *hemilasius*, and not that of *leucocephalus*.

single specimen out of 120 does it appear to be so thoroughly and entirely reticulate as in that species."

The only instance in which I have met, in an example of *B. ferox*, with a tarsus as completely reticulate as in *B. leucocephalus* is that of a specimen in the collection of Mr. Seeböhm, which was formerly in that of the late Mr. A. Anderson, but which has no locality attached to it.

I refer this specimen to *B. ferox*, as its general dimensions appear to be hardly large enough for *B. leucocephalus*, but more especially on account of the smaller size of the claw of the inner toe, which measures along the curve about 1.1, whereas in a female *B. leucocephalus* in the Norwich Museum this claw measures fully 1.4, and in another female referred to by Mr. Hume, who points out this peculiarity of *B. leucocephalus* in his article which I have already quoted, it measured 1.85.

The other dimensions of Mr. Seeböhm's specimen are:—

	in.
Wing	17.45
Tarsus	3.30
Middle toe <i>s. u.</i>	1.90

The specimen of *B. leucocephalus* in the British Museum, which is the type of Hodgson's *B. aquilinus*, has no memorandum of sex attached to it; but its dimensions, which are as under, perhaps indicate that it is a male, though a still smaller specimen (with a wing measuring only 18.60) is stated by Mr. Hume (*l. c.*) to have been a female. I add, for comparison, the measurements of five other specimens, all ticketed by the collectors as females:—

	Wing.	Tarsus.	Middle toe <i>s. u.</i>
In the British Museum :	in.	in.	in.
Type of <i>B. aquilinus</i>	18.50	3.25	1.60
♀. Dauria	20.00	3.60	1.80
♀. Hangchow, China	19.50	3.30	1.90
♀. Pootung, China	19.50	3.30	1.90
♀. Shanghae, China	19.30	3.40	1.70
In the Norwich Museum : ♀. Shanghae..	18.90	3.40 ¹	1.80

¹ In the 'Ibis' for 1876, p. 369, I erroneously gave this measurement as 3.20.

Mr. Hume, in 'Stray Feathers,' vol. iv. p. 364, gives measurements of *B. ferox* which yield the following results deduced from 94 sexed specimens, showing that it is, on the average, somewhat inferior in size to *B. leucocephalus* :—

	Wing.	Tarsus.
	in.	in.
Males	16.25 to 17.75	3.20 to 3.75
Females	18.00 to 19.25	3.20 to 3.80

The occasional abnormal reticulation in the unfeathered portion of the front of the tarsus which has been observed in *B. ferox* occurs also, and somewhat more frequently, in *B. plumipes*. I have observed in this species a complete reticulation taking the place of the ordinary scutellation in the following specimens preserved in the British and Norwich Museums, viz. five from Japan, one from China, and one from Kashmir, and a partial reticulation in one from Japan, four from China, one from Nepâl, and one from Northern India.

A specimen of this Buzzard exhibiting the above peculiarity and obtained in Sikkim is referred to by Mr. Blanford in the 'Ibis' for 1872, p. 87.

I have, in my Notes, expressed some doubt as to the identity of *B. plumipes* and *B. japonicus*; but I now believe them to be referable to the same species, though it is remarkable that the melanistic phase, for which Hodgson proposed the specific name of *plumipes*, has never, so far as I am aware, been obtained either in Japan or in China, but only in the more westerly regions inhabited by this Buzzard. It is also remarkable that though immature specimens from China and Japan almost invariably exhibit a pale plumage, more or less closely corresponding with that represented in the 'Fauna Japonica' (Aves), pl. 6 b¹, this pale plumage is comparatively

¹ An exception to this rule is, however, recorded in the 'Ibis' for 1878, p. 248, by Messrs. Blakiston and Prysor, who state that at Fujisan, in Japan, "a young bird was obtained from the nest of a dark colour."

rare amongst specimens of similar age from more western countries, most of these being decidedly darker, and, when not melanistic, much tinged with rufous. With reference to the plumage of adult specimens, I may remark that an adult male from Kashmir, in the Norwich Museum, agrees closely in coloration and markings with the figure of an adult from Japan in the 'Fauna Japonica' (Aves), pl. 6, and with adult specimens from Japan and Eastern China, which leads me to think that such geographical disrepancy of coloration as exists is probably limited to immature and to melanistic individuals.

The similarity which frequently occurs between immature specimens of *B. plumipes* and those of its two nearly allied western congeners, *B. vulgaris* and *B. desertorum*, renders it difficult to ascertain with precision the eastern limit to the geographical range of the two latter species, as well as the western limit of *B. plumipes*.

The most westerly specimen of *B. plumipes* which I recollect to have examined is one from Khokand, in the possession of Mr. Seebold; it is an immature bird in the pale phase of plumage, and has the abnormal peculiarity of all the rectrices, except the three external pairs, being destitute of any cross bars, in lieu of which they merely exhibit a slight irregular mottling.

Of the two most easterly examples of *B. vulgaris* which have come under my notice, one, which is also in Mr. Seebold's collection, is an adult female, shot 17th April, on the Altai Mountains, the other being an adult male in the Norwich Museum, from Ursem in Northern India.

Another remarkable Buzzard in Mr. Seebold's collection is a specimen from Krasnoyarsk; it is quite a young bird, with ten dark bars across the tail, and in its colour resembles the rufous phase of the immature *B. plumipes*; but it has been marked as a female by the collector; and if this be correct, it must, I think, from its small dimensions, be considered to be an eastern example of *B. desertorum*, though in the latter species the immature bird is usually less rufous than

the adult. The following are the measurements of this specimen :—

	in.
Wing	14·25
Tarsus	2·75
Middle toe s.u.	1·45

which are too small to agree with normal females of *B. plumipes*, as may be seen by a reference to 'Stray Feathers,' vol. v. p. 67.

With reference to the eastern range of *B. desertorum*, I may add that Mr. Hume has recorded, in 'Stray Feathers,' vol. x. p. 159, a very small male Buzzard, which probably belongs to this species; it was shot by Mr. Davison on the Brahmagari Hills, in Southern India, on 16th April, 1881. I believe that this specimen is the only reliable ground for including India amongst the countries inhabited by this species¹, and that the Buzzards from Etawah, Nepál, and Madras, preserved in the British Museum, and inserted in Mr. Sharpe's Catalogue under the head of *B. desertorum*, should rather be referred to *B. plumipes*.

I may here remark that melanism seems to be of much rarer occurrence in *B. desertorum* than in either *B. ferox* or *B. plumipes*. I only know one instance of it, a specimen obtained by Sir A. Smith in Southern Africa, and now preserved in the British Museum.

The same collection now also contains the Everley Buzzard alluded to in my Notes, which I have recently reexamined, and consider to be an unquestionable example of *B. desertorum*.

I would conclude these remarks upon the Buzzards found in Asia by referring to *Buteo menetriesi*, a recently described species mentioned by Mr. Seebohm in his paper on the "Birds of the Caucasus" (*vide* 'Ibis,' 1883, p. 5).

I have been indebted to Mr. Seebohm's kindness for the opportunity of consulting a translation of Mr. Bogdanow's account of four specimens of this Buzzard, and I have

¹ *Vide* B.O.U. List of British Birds, p. 94.

extracted from it the following sentence relating to the coloration of the tail, which I here insert because it describes the rectrices as less free from transverse markings than might be inferred from the paragraph relating to this species in Mr. Secbohm's paper:—"The central feathers of the tail are of a pure caroty colour, with white shafts; on the extreme part there is one broad, and two, three, or four small narrow unequal black bars; the outside tail-feathers have the external web black-brown, with a grey shading, or caroty brown, the inner web is caroty, relieved here and there by a brown shading, and on both are black-brown cross bars throughout the entire length of the feather; the outermost feather is very broad, and the quill is white; beneath the tail is a light caroty colour with a whitish reflection, and only the extreme black-brown margin is faintly distinguishable."

APPENDIX F.

On Buteo solitarius.

DR. SCLATER, in his account of the birds collected in the Sandwich Islands during the visit of the 'Challenger' to Hilo Bay, published in the P. Z. S. for 1878, p. 346, and subsequently in the 'Zoology of the Voyage of H.M.S. Challenger,' pt. 8, p. 93, mentions, under the head of *Buteo solitarius*, that "two specimens were obtained, but one of them was subsequently lost." The specimen supposed to have been lost has since come to light; a ticket had been attached to it (apparently through some inadvertent error) which bears an inscription to the following effect:—"♀. Yedo Bay, Japan. Eyes brown;" and this led to its being misnamed "*Buteo japonicus*." Both specimens are preserved in the British Museum, and both are undoubtedly referable to *B. solitarius*.

The following are the principal measurements of this second specimen, and they are very nearly identical with those of the female already described and figured in the 'Zoology of the Voyage of the Challenger,' viz. :—

	in.
Wing	11·8
Tarsus	2·8
Middle toe <i>s. u.</i>	1·8
Culmen, exclusive of cere	1·1

Speaking of the first specimen as no. 1, and of the second as no. 2, I may state that the latter agrees with the former in the scutellation of the tarsus and foot, in the form of the bill, and in the emargination of the inner webs of the four first primaries; it also agrees in markings and coloration,

with some exceptions, which probably indicate (when considered as a whole) that it is a younger specimen, and which I have thus noted :—In no. 2 the dark cross bars on the primaries are only rudimentary ; there is a slight rufous tinge on the sides of the throat and neck, also on the nape and on the least wing-coverts near the carpal joint. In no. 2 all the feathers of the underparts are browner than in no. 1 ; those on the throat are white with rather broad brown centres ; on the upper breast the feathers are similar, but a little darker ; those of the lower breast are yellowish white, with large and conspicuous brown shaft-marks ; on the abdomen the feathers are yellowish brown, largely barred and tipped with dark brown, and the crissum is barred with alternate bands of dark and of rufous-brown. In specimen 2 the number of cross bars on the central rectrices is nine, including the subterminal one, which has been almost obliterated by wear and weather, but on a new rectrice which has appeared the bars are much less distinct than on the older. In no. 2 the under wing-coverts, excepting the lowest row, and also the axillaries are much darker and more rufous than in no. 1 ; and this colour extends in no. 2 to the edge of the wing, where the corresponding feathers in no. 1 are of a nearly immaculate cream-colour.

I may add that, in a communication which I recently received from Mr. S. B. Dolc, of Honolulu, that gentleman, referring to this species, writes that "it frequents the ocean and builds in inaccessible places."

APPENDIX G.

On Buteo leucops and Buteo galapagensis.

AMONGST the synonyms of *Buteo galapagensis* Mr. Sharpe places *B. leucops* of G. R. Gray, a name given by Mr. Gray to a single specimen in the British Museum which was collected during the voyage of the 'Beagle,' and was thus entered in the list of specimens of Birds in the British Museum, published in 1844:—"The Galapagos Buzzard, *Buteo galapagoensis*, *Craxirex galapagoensis*, Gould, Voy. of Beagle, Zool. t. 2. (a) Galapagos Archipelago, presented by Sir W. Burnett and Capt. Fitzroy, R.N." In the next edition of the museum list, published in 1848, the title of this specimen was altered to " *Buteo leucops*, the White-faced Buzzard," no. 13, p. 36; in Mr. Gray's 'Hand-list' (1869) it appears as " *Tachytriorchis leucops*," no. 64, and as distinct from " *Craxirex galapagoensis*," no. 47.

I have recently examined this specimen without being able entirely to satisfy myself as to the species to which it really belongs. It is a very young bird, as is proved by the appearance of the corners of the mouth and by the bases of the primaries being still in their sheaths; it bears a general resemblance in coloration to the first plumage of both *B. galapagensis* and *B. erythronotus*, differing, however, from any specimen which I have seen of either in that dress in being much less variegated on the interscapular and upper scapular feathers, that appearance being caused by the fulvous edgings to those feathers being in *B. leucops* extremely narrow and inconspicuous.

In the first plumage of *Buteo erythronotus* all the tints of

brown, both the darker and also the paler and more fulvous, are decidedly less intense than in *B. galapagensis* of a corresponding age; and in this respect *B. leucops* resembles the immature *B. erythronotus*, as it also does in its narrow white frontlet, which is entirely absent in all the immature specimens that I have seen of *B. galapagensis*.

The dimensions of *B. leucops* agree fairly with those of the smaller males of *B. erythronotus*, but differ from those of the males of *B. galapagensis* in the following particulars, viz. the tarsus in *B. leucops* is a little longer, but the measurements of the middle toe, the wing, and the bill are all less; it should, however, be added that immature examples of *B. galapagensis* only partially exhibit the remarkable development of the bill which especially characterizes the adults of that species.

On the whole, I incline to the opinion that *B. leucops* should be referred to *B. erythronotus* rather than to *B. galapagensis*, or it may possibly be the young of some South-American species distinct from both¹. If it be not a young *B. galapagensis*, the locality assigned to it is probably, through some accident, a mistaken one.

I have taken the annexed measurements (p. 145) of the specimens of *Buteo galapagensis* now in the British Museum and in the collection of Messrs. Salvin and Godman, and also of the specimen which bears the name of *Buteo leucops*, to which I have added, for comparison, those of two males of *Buteo erythronotus*, preserved in the Norwich Museum, one being quite a young specimen, and the other an adult.

¹ In *B. leucops* the first three primaries only are emarginated, in which it resembles the other Buzzards of the group to which it belongs.

	Wing.	Tarsus.	Middle toe s. u.	Culmen exclusive of cere.	Lower mandible from gape.	Depth of upper mandible next the cere.
<i>Buteo galapagensis.</i>	in.	in.	in.	in.	in.	in.
Females ascertained or presumed.						
Adult specimens :						
Abingdon Island	17.30	3.05	2.20	1.40	1.80	0.60
Indefatigable Island	17.40	2.80	1.90	1.40	1.80	0.60
Immature specimens :						
The Galapagos	17.15	3.00	2.00	1.30	1.75	0.55
Indefatigable Island	17.40	2.70	2.00	1.40	1.55	0.55
Ditto	16.80	3.10	2.00	1.30	1.70	0.65
Males ascertained or presumed.						
Adult specimens :						
The Galapagos	15.05	2.80	1.80	1.30	1.45	0.50
Abingdon Island	15.50	2.70	2.00	1.25	1.55	0.55
Indefatigable Island	15.90	2.70	2.05	1.35	1.65	0.55
Immature specimen :						
Indefatigable Island	15.50	2.50	1.75	1.10	1.35	0.55
<i>Buteo leucops</i> (type)	14.50	3.00	1.30	0.90	1.30	0.30
Young male of <i>B. erythronotus</i>	14.55	3.05	1.50	0.90	1.30	0.45
Adult male of <i>B. erythronotus</i>	15.0	3.00	1.50	1.05	1.25	0.50

APPENDIX H.

On the Genus Buteola.

THE genus *Buteola* has, as stated by Mr. Sharpe at p. 158 of his Catalogue, a "distinct central tubercle" in the nostril, which I think is a sufficient ground for separating it from the genus *Buteo*, even when the latter term is used in the somewhat wide sense in which I have employed it; this tubercle is, however, usually destroyed in the preparation of the skin, and is, in consequence, imperceptible in the majority of specimens.

As regards the melanistic phase of *Buteola brachyura*, I think that its existence is proved by a completely melanistic male from Veragua in the possession of Messrs. Salvin and Godman, in which the nostrils most distinctly show the characteristic central tubercle.

In the 'Ibis' for 1876 I endeavoured (at pp. 477 and 478) to define the differences which I then thought might be traced between *Buteo fuliginosus*, Selater, and the melanistic state of *Buteola brachyura*; but I now believe that these differences are merely individual and not specific, and that this being so, *Buteo fuliginosus* must sink into a synonym of *Buteola brachyura*: this view, in which Mr. Salvin concurs, is more fully explained in a letter written by me, which will be found quoted in Mr. Ridgway's paper on this subject, published in the 6th volume of the 'Bulletin of the Nuttall Ornithological Club,' p. 207. Mr. Ridgway, in this article, mentions that he had never seen a specimen of *B. brachyura* in which the coloration was intermediate between the normal and the melanistic plumage; and I may therefore mention that such a specimen, a male from Jalapa in Mexico, exists in the Norwich Museum: this example is melanistic through-

out, except that the black on the underparts is varied by longitudinal markings of white, or pale fulvous, on the edges of most of the feathers; there is also an admixture of fulvous on the ear-coverts, and of white on the under wing-coverts, the sides of the upper tail-coverts, the basal portions of the nuchal feathers, and very slightly on the thighs, which latter are also indistinctly cross-barred with rufous.

I have given, in my Notes ('Ibis,' 1876, p. 479), the measurements of several specimens, all of which I now consider to be referable to *B. brachyura*; since then the Norwich Museum has acquired one, and Messrs. Salvin and Godman three additional examples, the dimensions of which I subjoin:—

	Wing.	Distance from tip of tertials to tip of primaries.	Tarsus.	Middle toe s. u.
Melanistic:				
Norwich Museum; Costa Rica	in.	in.	in.	in.
Collection of Salvin and Godman; U. S. Colombia (marked ♂ by collector)	12·40	3·60	2·20	1·70
Normal:				
Adult; Bolivia	11·85	3·40	2·10	1·60
Immature:				
Costa Rica.....	13·10	3·20	2·35	1·65
	12·55	4·30	2·20	1·50

I was not aware, when I referred in my notes to a nearly allied species, which stands there and in Mr. Sharpe's 'Catalogue' as "*Asturina leucorrhoa*," that it, like the last-named species, has a central nasal tubercle, which, when uninjured, resembles in its position that of *Buteola brachyura*, and which I think is a reason for considering it a second member of the latter genus, though not a typical one. I believe that its true position is that of a connecting link between *Buteola brachyura* and the genus *Rupornis*, which latter it resembles in having slightly shorter wings, in proportion, than *B. brachyura*, and the iris yellow instead of brown, as in *B. brachyura*.

APPENDIX I.

On Urubitinga zonura and Urubitinga ridgwayi.

MR. RIDGWAY, in the article in his 'Studies of Ameriean Faleonidæ' relating to *Urubitinga zonura*, remarks:—"The South-Ameriean and Middle-Ameriean speeimens of this speeies are so easily distinguished that they seem to be separable as well-marked geographical races"; and he adds a summary of the differences which he has observed between the two races. Some of these do not appear to me to be suffieiently constant and distinct to be much relied on; but the following, which I have noted on a comparison of eight adult or nearly adult speeimens of the southern with eight of the northern race, may, I think, be accepted as a suffieient justification for regarding the latter, which inhabits Mexico and Guatemala, as a subspecies distinct from the southern *U. zonura*, the range of which extends from Costa Rica southward to Chili. I propose, as the difference between the two races was first pointed out by Mr. Ridgway, to indicate that circumstance by attaching to the more northern of the two the subspecific designation "*ridgwayi*"; and I think that *U. ridgwayi* may be defined as distinguishable from *U. zonura*, when fully adult, by the greater proportion of white mingled with the black plumage of the under wing-coverts and of the tibiæ, and by the larger number of alternate black and white cross bars on the tail, as also by the comparative average narrowness of the white bar immediately above the subterminal black bar on the tail.

The following particulars of the speeimens which I have examined, and which are contained in the Norwiche Museum and in the collection of Messrs. Salvin and Godman, may serve to exhibit more clearly the peculiarities of the two races when adult (in their immature plumage they do not seem to me to be distinguishable). It will be seen that the

details here given relate to the coloration of the under wing-coverts, to that of the tibial feathers, and the proportionate dimensions of the cross bars on the tail:—

<i>Urubitinga zonura.</i>	White base to tail.	First black bar.	Next bar (white).	Following bar (black).	White tip.
No. 1. "South America."—Thighs speckled with white, and wing-linings very slightly so	in.	in.	in.	in.	in.
	None.	0·90 (but indistinct).	2·70	3·30	0·60
No. 2. "South America."—Thighs and wing-linings black, with no admixture of white; white base of tail mottled with black ..	1·10	1·60	3·00	3·60	0·30
No. 3. Chili.—Thighs and wing-linings as in No. 2.	None.	0·60	3·70	3·20	0·40
No. 4. United States of Colombia. — Thighs speckled with white, but no white on the wing-linings	None.	1·00	2·00	3·90	0·50
No. 5. Sarayacu, Ecuador; perhaps not quite adult.—Thighs slightly speckled with white; wing-linings entirely black, except one white spot	1·10	1·60	1·50 ¹	4·50	0·30
No. 6. Maroni River, Surinam.—Thighs slightly speckled on their inner surface; no white on the wing-linings	None.	0·30 (but indistinct).	4·40	3·80	0·50
No. 7. Panama; not quite adult.—Thighs and wing-linings much barred with white, indicating remains of immaturity, which are also apparent on the breast	None.	1·40	3·40	3·10	0·50
No. 8. Nicoya, Costa Rica.—Thighs barred with white, and wing-linings slightly speckled with the same	1·10	1·10	3·90	2·60	0·40

¹ This bar is narrower than in any other specimen I have seen, and is slightly mottled with brown on the sides of the central rectrices.

<i>Urubitinga ridgwayi.</i>	White base to tail.	First black bar.	Next bar (white).	Second black bar.	Next bar (white).	Third black bar.	White tip.
No. 1. Guatemala; not fully adult.—Thighs and wing-linings much barred with white	in. None.	in. 0·60	in. 0·50	in. 1·40	in. 1·30	in. 3·10	in. 0·40
No. 2. Savana Grande, Pacific coast of Guatemala; adult.—Thighs barred and wing-linings speckled with white	None.	1·10	0·30	1·60	1·20	3·10	0·20
No. 3. Coban, Guatemala; adult.—Like No. 2	None.	1·30	0·40	1·70	2·00	3·00	0·20
No. 4. Sonata, Chiapas, South Mexico; ♂ adult.—Thighs barred and wing-linings very slightly speckled with white....	None.	1·00	0·20	2·00	1·40	3·00	0·20
No. 5. Sonata; ♀ adult.—Thighs and wing-linings speckled with white....	None.	1·00	0·20 (but indistinct).	2·00	1·70	3·40	0·40
No. 6. Sonata; ♂ adult.—Like No. 5.....	None.	1·00	0·30 (but indistinct).	1·60	1·30	2·60	0·30
No. 7. Presidio, Mexico; ♀ adult.—Like Nos. 5 and 6	0·40	0·80	0·40	1·20	1·50	3·70	0·30
No. 8. Presidio; ♀, not fully adult; shot from her nest, with eggs, 3rd May	None.	1·10	0·40	1·50	1·50	3·50	0·40

APPENDIX J.

On the Changes of Plumage in certain Specimens of Pernis apivorus.

TOWARDS the end of September and early in October 1881, a considerable migratory arrival of Honey-Buzzards occurred in Norfolk and in other counties of the east of England ; all the specimens which I saw were birds of the year, and three such, captured in Norfolk on the 24th and 28th September, were brought to me alive. I propose to record a few notes respecting these specimens.

No. 1 (caught at Southrepps) was one of the darkest specimens I have ever seen, the entire plumage being a very dark brown, with somewhat of a purplish gloss upon the mantle, the irides being also of a very dark brown.

No. 2 (caught at Filby) was a similarly coloured bird, but not quite so dark as No. 1, and in one respect less whole-coloured, the shafts of the breast-feathers being slightly, though perceptibly, darker than the other portions of the feathers ; this bird had irides of a dark lead-colour.

No. 3 (caught at Trimingham) was a much paler bird than either No. 1 or No. 2 ; its colour was a cinnamon-brown, but with a slight variation of tint in the feathers of the head ; its irides were bluish grey.

The three birds were very indistinctly marked upon the tail, the cross bars being least observable in the two darker specimens.

On January 25, 1882, I made a note of some slight changes in all three specimens, though none of them had then moulted. In No. 1 the scapulars had become slightly paler, and the inner webs of the median and greater wing-coverts decidedly

so; the irides had become a less intensely dark brown, and had acquired a tinge of bluish. In No. 2 the dark shaft-marks on the breast had become more distinctly visible in contrast to the other portions of the feathers, the latter having apparently faded; the tips of the median, also the tips and visible portions of the inner web of the greater wing-coverts and the tips of the secondaries and tertials had all become more or less white; the irides had become bluish grey. In No. 3 the cheeks had become noticeably paler; white bases and slight white tips had become visible on the scapulars, and the irides had become a shade lighter.

On April 1, 1882, I made the following note:—"The irides of all three have now assumed a greyish-yellow stone-colour or pale straw-colour, but they are still darker in No. 1 than in Nos. 2 and 3; none of the three have moulted, and the plumage of Nos. 2 and 3 has not perceptibly changed since January; but No. 1 has become very much paler, and its plumage, though it does not appear to be worn, seems a good deal faded."

Towards the latter part of May 1882 the birds began to moult; but before the end of that month Nos. 2 and 3 died without having undergone further changes.

By the end of July 1882 No. 1 was in full moult; and on September 4, 1882, I made a memorandum as to the remarkable changes which it had then undergone, to the following effect:—"The head has become white, with a dark brown centre to each feather, except on the cheeks and ear-coverts, which are pure white, and excepting also a brown patch between the bill and the eye, extending for nearly half an inch above the eye and also slightly behind it; on the neck also the feathers are now white, with larger dark centres than those on the head; the upper scapulars and interscapulars are dark brown, broadly tipped with white; the lower scapulars are dark brown, that colour being deepest near the tips; the lesser and median coverts are not yet moulted, but the new feathers of the greater coverts are brown, intermingled with white; the secondaries and tertials are of a median brown, with two cross bars and the shaft-

mark of a darker brown and a white tip; the tail is a rather pale brown, with four very distinct cross bars of dark brown; the upper breast is pure white, except on the centres of the feathers, which are marked with brown sagittate spots of various sizes, but mostly large in proportion to the size of the feather; the lower breast is not yet moulted, and is a rather pale faded brown; the abdomen is white, mingled with brown, the latter being apparently a remnant of unmoulted plumage; the under wing-coverts and the under tail-coverts are white, transversely barred with brown."

This bird's moult was suspended, soon after the date of the above memorandum, before it was completed, and it was not resumed till May 1883; it was still progressing in July, but I then noted that there was no further change of colour except as regards the following points—the brown mark adjacent to the eye had disappeared; some of the white feathers on the cheek had acquired dark centres; some new feathers had appeared amongst the median wing-coverts, and were dark brown tipped with white; the portion of the secondaries between the dark bars became decidedly tinged with grey, the flanks and abdomen white, with broad transverse bars of brown; the irides continued to be of a very pale straw-colour, with an extremely slight tinge of green. Between July 1883 and January 1884 the moult progressed very slowly and without producing any noticeable change of colouring; the irides, however, have become, during the interval, rather more decidedly yellow; no tinge of grey has as yet appeared either on the lores or elsewhere on the head. The bird appears very healthy, and has been fed on rats and mice, small birds, sparrows' eggs, frogs, and wasps' grubs, according to the season.

APPENDIX K.

On the Birds of the Genus Baza inhabiting the Solomon Islands and the New Britain Group.

Mr. E. P. RAMSAY has pointed out that the *Baza* inhabiting the Solomon Islands should be regarded as subspecifically distinct from the nearly allied and widely distributed *B. reinwardti*; and he has done me the honour of attaching my name to this new subspecies.

In the 'Journal of the Linnean Society' (Zoology), vol. xvi. p. 130, Mr. Ramsay remarks that *B. gurneyi* differs from the typical *B. reinwardti* "in having a paler head and neck, in having an almost pure white under surface, and in the bars being narrower, fewer, and of a darker tint." He also mentions that the under wing-coverts are white, except "a faint tinge of buff on the median under-coverts," in which respect they differ from the decidedly buff-coloured under-coverts of the typical *B. reinwardti*.

I have only examined one specimen of *B. gurneyi*, an adult male, collected on Russell Island, in the Solomon Group, by Lieut. Riehards, R.N., and kindly lent me by Canon Tristram. This specimen exhibits the peculiarities above referred to; the pale grey tint of the nuchal and interscapular feathers reaches lower down on the back than is usual in the typical *B. reinwardti*, though in one of the specimens of the latter preserved in the Norwich Museum (a bird from Dorey, not fully adult) it is equally extended; the cross bars on the under surface are decidedly darker in the Russell Island specimen than in any example that has come under my notice of *B. reinwardti*, though I have seen some of the latter with the bars quite as narrow and as few

as in the Russell Island bird, and with the interspaees quite as white.

The distinguishing features of *B. gurneyi* appear to me to be the white under wing-eoverts, the very dark hue of the transverse pectoral and abdominal bands, and the eomparatively great extent of the grey tint on the interscapular region.

Some remarks of mine on a *Baza* from the New Britain Group¹ will be found in the 'Proeeedings of the Zoological Soeiety' for 1879, p. 450. This specimen, whieh is now in the possession of Captain Wardlaw Ramsay, to whose kindness I have been indebted for an opportunity of re-examining it, agrees with *B. gurneyi* in the extended nuehal grey eolouring and in the white under wing-eoverts (whieh latter peeuliarity was noted by Count Salvadori in the 'Ibis' for 1879, p. 318), but differs from it in the transverse bars on the underparts being broad and of a pale grey instead of narrow and of a dark blaekish slate-eolour; these bars are deeidedly wider and of a paler grey in this speeimen, even than in the typieal *B. reinwardti*, from whieh, as well as from *B. gurneyi*, I believe the New Britain bird to be subspeeifically distinet, though it may be wise to wait for additional speeimens before proposing for it a separate subspeeific designation.

¹ For the dimensions of this specimen see 'Ibis,' 1880, p. 466.

APPENDIX L.

On Tinuuneulus arthuri.

In the list of a collection of birds from Mombasa, which I contributed to the 'Ibis' for 1881 (*vide* p. 124), a Kestrel was included which was not sexed by the collector, but which, on a too hasty examination, I took to be a "female in worn plumage" of *T. alaudarius*. I subsequently alluded to this specimen, in a footnote to p. 457 of the same volume, as being "remarkable for having narrow brown transverse bars on the sides of the breast;" and at p. 462 I gave its principal measurements, showing that it has a shorter wing than twenty males of *T. alaudarius* from Europe, Africa, and Asia with which I compared it.

I have subsequently given this Kestrel a good deal of consideration, and have come to the conclusion that I was wrong in referring it to *T. alaudarius*, and that I should be equally so were I to refer it to any other species hitherto described; it comes nearest in its markings to *T. rupicoloides*, but its much smaller size separates it from that species as decidedly as the peculiarity of its markings, especially on the flanks, distinguishes it from *T. alaudarius*.

I find, on examining six Transvaal males of *T. rupicoloides*, that the measurement of the wing varies from 10.70 to 11.55 inches, that of the tarsus from 1.85 to 2, and of the middle toe *s. u.* from 1.20 to 1.35; in the Mombasa Kestrel one wing measures 9.30 and the other 9.40, the tarsus 1.70, and the middle toe *s. u.* 1.15; as regards markings it resembles, in those of the head, scapulars, and wing-coverts,

both sexes of *T. rupicoloides* and also the female of *T. alaudarius*, the general coloration of these parts corresponding more nearly with the latter than with the former. It also resembles *T. alaudarius* and differs from *T. rupicoloides* in the absence of rufous spots or bars from the outer web of the wing-feathers; but it resembles *T. rupicoloides* in having the upper tail-coverts banded with alternate transverse bars of dark and pale grey more distinctly than is the case in the great majority of those females of *T. alaudarius* which exhibit a cross-barring of that description; each feather on these parts has also a dark shaft-mark. In the markings of the tail it resembles the less adult specimens of *T. rupicoloides*; these markings consist of six blackish-brown bars, with the tip and the interspaces whitish brown, the latter being much tinged with grey on the basal moiety of the central rectrices. On the under surface of the Mombasa bird its similarity to *T. rupicoloides* is remarkable; the feathers of the jugulum and upper breast are pale brown, with the dark shaft-marks much narrower than in the female of *T. alaudarius*, and even narrower than in some specimens of *T. rupicoloides*; these marks are continued down the centre of the lower breast, the ground-colour of which, as also that of the flanks, is somewhat darker and more rufous than that of the jugulum; the flanks are crossed with eleven dark transverse bars, of which there are either two or three on each feather of these parts, reaching quite across it; these bars closely resemble those on the flanks of the adult *T. rupicoloides*, but are a little narrower; the abdomen, tibiæ, and crissum are pale white, tinged with fulvous, and, with the exception of the crissum, exhibit a few minute dark spots; the axillaries are less coarsely marked than in the female of *T. alaudarius*, and are in this respect more like those of *T. rupicoloides*; and the same remark applies to the under wing-coverts, though in many specimens of *T. rupicoloides* these are immaculate, which they are not in the Mombasa Kestrel, the latter, like some individuals of *T. rupicoloides* having this portion of the plumage sparsely variegated with narrow shaft-marks.

The only specimen which I have seen of this new Kestrel was sent from Mombasa, on the East-African coast, by Mr. J. W. Handford, to my late relative the Rev. F. Arthur Buxton, who presented it to the Norwich Museum, and in remembrance of whom I propose to call it *Tinnunculus arthuri*.

APPENDIX M.

On Tinnunculus eenehris and Tinnunculus pekinensis.

IN my notes on *T. pekinensis* I have briefly described three males of that Kestrel¹; and since then the Norwicheh Museum has acquired another adult male, obtained on March 26th, 1880, by Mr. Inglis at Dilkosha, in Caehar. In this specimen the entire wing-eoverts are grey, with the exception of a very slight sprinkling of rufous on the right wing adjacent to the seapulars, and a still slighter but similar tinge in the same position on the left wing; the seapulars and interseapulars in this bird are of a rich and rather dark rufous, and it may therefore, as regards the upper surface, be considered a very typical example of *T. pekinensis*; but below, it is quite as much spotted as an ordinary male of *T. cenchris*, the total number of dark spots on the under surface being about fifty.

The Norwicheh Museum has also recently acquired a male Kestrel, shot by Mr. Ayres on a farm about 30 miles from Potehefstrom, in the Transvaal, on January 29th, 1879, which, I think, is not to be distinguished from *T. pekinensis*, as the entire wing-eoverts are grey, with the exception of the intermixture of a few rufous feathers (about five on the left wing and one on the right) and a slight tinge of the same hue on the edges and shafts of a few of the grey feathers, especially those of the least eoverts. This specimen has a rich rufous mantle, but a shade paler than that of the Dilkosha Kestrel previously mentioned; on the under surface there are only about ten dark spots, and these are very small and mostly on the flanks. It is, I think, impossible to say with certainty whether this bird is (like many specimens of

¹ *Vide* Ibis, 1881, p. 471.

Erythropus amurensis) an Asiatic migrant to South-east Africa, in which case it must stand as *T. pekinensis*, or an abnormally-coloured *T. cenchris* which had migrated from Europe. I have entered it at the Norwich Museum as *T. pekinensis*, together with a female killed on the same day at the same place (the females of the two races being undistinguishable); but I am by no means sure that I am right in this, as another male Kestrel, procured at the same spot eight days previously and also sent to me by Mr. Ayres, is a typical *T. cenchris*. Mr. Ayres noted that the latter species (to which he referred all three specimens) was present on this farm when these birds were shot "in considerable numbers."

I may add that another recent addition to the Norwich Museum is an adult male of *T. cenchris*, which is quite typical as regards the extent of rufous on the wing-coverts, but entirely immaculate on the under surfaces. This specimen was obtained in Sicily in the month of June.

On the whole it would seem that *T. cenchris* and *T. pekinensis* are geographic races of the same species, perhaps subspecifically separable, but with the line of demarcation between them by no means very constant or distinct.

Since the above remarks were penned, another Kestrel, in adult male plumage and apparently referable to *T. pekinensis*, has been acquired by the Norwich Museum; this Kestrel, which was killed near Potchefstroom by Mr. Ayres, resembles Asiatic examples, as regards the coloration of the wing-coverts, quite as closely as the male previously sent; but it is more spotted on the breast and flanks than is the case in that specimen.

APPENDIX N.

*On the Existence in North America of Hierofaleo gyrfaleo,
and its possible Hybridism with H. holboelli.*

In the 'Ibis' for 1882, pp. 582, 583, I quoted some memoranda, which I made in 1870 and 1872, respecting some North-American Gyrfalcons which had been sent to this country for examination from the Smithsonian Institution, and which I was then disposed to consider as not separable from *Hierofalco islandus*.

Subsequently to the completion of my notes on the Gyrfalcons, four of the specimens above referred to, with some others, were, through the good offices of Mr. Ridgway, sent to me for further examination. A careful comparison of these skins with authentic Scandinavian examples of *H. gyrfalco* considerably modified the views which I had previously entertained, as will be seen by the following memoranda which I made as the result of the comparisons to which I have alluded :—

No. 43,144 $\frac{1}{2}$. *Female, with four eggs: Fort Anderson* (referred to in the 'Ibis' for 1882, pp. 582-584).—This skin corresponds with *H. gyrfalco*, but not with those specimens in which the adult plumage is most fully developed; it agrees with a female of that species, apparently in the plumage of the second year (No. 6 in the Norwich Museum), which was collected by, or for, the late Mr. Wolley at Langfjord, in East Finmark, in April or May 1857. The Finmark bird has, however, whitish edges to the feathers on the crown of the head, which are wanting in the Fort-Anderson

Falcon, except upon the forehead; in the absence of these white edges the Fort-Anderson specimen agrees with two Lapland examples in the Norwich Museum, both of which I consider to be more fully adult than that from Langfjord.

No. 1564. *Alaska*.—This Falcon so closely resembles that last mentioned that the same remarks apply to both.

No. 51,690. *Male: Yukon* (referred to in the 'Ibis' for 1882, p. 584).—This specimen I now refer to *H. gyrfalco*, and consider its plumage to be very fully adult, more so than that of the two preceding; it agrees in coloration with an adult female, shot from the nest in Lapland, which was in the collection of the late Mr. Wolley, and is now No. 1 of this species in the Norwich Museum.

No. 43,142. *No locality or sex marked, but apparently a female* (referred to in the 'Ibis' for 1882, p. 584).—This specimen is in immature plumage as regards the mantle, but elsewhere has assumed adult dress; it agrees with a female *H. gyrfalco* in a similar stage of plumage (No. 3 in the Norwich Museum), which was obtained in Lapland by Mr. Wolley, having been shot from the nest in March 1855.

No. 35,451. *Male: Yukon River, June 1862* (referred to in the 'Ibis' for 1882, p. 583).—I examined this specimen in 1872, and then noted that it agreed "very well with a very adult male, from Iceland," of *H. islandus*, now in the Norwich Museum, and No. 2 in the series of Iceland Falcons there preserved. On my recently renewed comparison of these two specimens, the general agreement of their appearance was obvious; but upon a closer examination I found that the Yukon male differs from the Icelandic in the feathers on the crown of the head being much more narrowly bordered with whitish, and in the pale cross bars on the lower part of the back being greyer and less distinctly white, their colour thus resembling that of the corresponding transverse bars in the adult *H. gyrfalco*; but on the interscapular feathers and on those of the lesser and median wing-coverts the light bars are, on the contrary, a decidedly purer white than is usual in the Scandinavian adults of *H. gyrfalco*; indeed I have only seen one Scandinavian Falcon like it in this respect, and

I think it possible that this may have had a wrong locality accidentally attached to it, and may in reality be Icelandie and not Scandinavian. In the white colour of these bars this Yukon Falcon resembles the adults of both *H. islandus* and of *H. holbælli*; but in their depth, measured from their upper to their lower edge, it agrees with *H. holbælli* rather than with *H. islandus*. The Yukon bird resembles the adults, both of *H. islandus* and of *H. holbælli*, in the almost spotless white of the upper breast; but it differs from *H. islandus* and from the paler adults of *H. holbælli* in the greater size of the dark spots on the abdomen, and in the cross bars on the tibial feathers, in which it resembles *H. gyrfalco* and the darker adults of *H. holbælli*.

On the whole this Yukon Falcon seems to me to be a specimen of an intermediate character; and I suspect that it is one in which the peculiarities of *H. gyrfalco* have been modified by hybridism with *H. holbælli*.

No. 1524. *Alaska*.—This is evidently a bird in the first year's plumage; but from the appearance of the lower back and tail, and also from the spots on the lower scapulars, I should suppose it to be nearly, or perhaps quite, twelve months old; it resembles the ordinary dress of the Scandinavian examples of *H. gyrfalco* at a corresponding age.

No. 1486. *Alaska*.—This bird seems to me to be of similar age to the last, but to resemble the ordinary immature dress of *H. holbælli* rather than that of *H. gyrfalco*, notably in the broad white borders to the feathers of the upper part of the head, in the whitish-brown edges to all the feathers of the mantle, and also in the decidedly white hue of the pale cross bars on the tail.

The result of the comparisons which I have here recorded leads me to agree with the conclusion previously arrived at by Mr. Sharpe and by Mr. Dresser that *H. gyrfalco* is found in the northern parts, not only of Europe and of Asia, but also of North America. The North-American range of this species, however, has not at present been very clearly ascertained, especially to the eastward; and a similar uncertainty exists as to the western limits of *H. holbælli*, as also to the

localities, if such there be, where both races occur and where hybridism may perhaps result from such propinquity. As I have already mentioned in my Notes, the Norwich Museum possesses three immature Falcons from Hudson's Bay, and these I believe to be referable to *H. gyrfalco*; but as they are not in adult dress, I do not feel absolutely certain of the correctness of this identification: the question of the geographical range of these Falcons is one which I think affords an interesting subject for further investigation, and which I trust will receive the attention that it merits.

APPENDIX O.

On the Identity of Accipiter nisoides, Blyth, Accipiter gularis (Temm. & Schleg.), and Accipiter stevensoni, Gurn.; also on Accipiter virgatus (Temm.) and its two Subspecies, Accipiter affinis, Hodgson, and Accipiter manillensis, Meyen.

THE following remarks would have been inserted in an earlier portion of this volume, but for the circumstance that it was only very recently that I had the opportunity of examining two adult males and an adult female (all obtained in Japan) of the Hawk for which, in the 'Ibis' for 1863, p. 447, I proposed the specific name of "*stevensonii*."

One of these specimens, procured at Tate-yama, was very kindly lent to me by Mr. Blakiston, and the other two form part of a valuable collection of Japanese Raptoreis lately presented to the Norwich Museum by Mr. Ringer, who obtained them at or near Nagasaki.

The fact, with which I thus became acquainted, of the occurrence in Japan of *Accipiter stevensoni* has suggested to my mind that the description and plate of "*Astur (Nisus) gularis*" in the 'Fauna Japonica' represents my *Accipiter stevensoni*, and not, as I had previously supposed, the large northern form of *Accipiter virgatus*.

The examination of the adult specimens from Japan to which I have just referred, and of several immature Japanese examples in the Norwich Museum and in the collection of Mr. Blakiston, has confirmed my present belief that *A. stevensoni* is not separable from the true *A. gularis*.

The figure of the female of *A. gularis* in the 'Fauna Japonica' agrees with the adult female of *A. stevensoni*; that of the male is not altogether so satisfactory, and the gular stripe in both figures is too coarsely delineated; it is, however, more accurately defined in the accompanying letterpress as "une fine raie longitudinale," and merely consists in the adult birds of a few hair-like and inconspicuous streaks. In the figure of the male the rufous colouring of the breast is represented of a deeper hue than exists in the great majority of adult males, though I have seen three in which the breast was more or less decidedly rufous¹. A third point in which the figure of the male bird in the 'Fauna Japonica' appears to me to be open to criticism is the very dark colouring of the cross bars on the lower flank; I do not recollect to have observed this peculiarity in any of the males that I have examined, the normal colouring of these bars in the adult male being much paler than is represented in the 'Fauna Japonica.'

The publication of the description and plate of *A. gularis* in the 'Fauna Japonica' took place, according to Mr. Sharpe's Catalogue, in 1850; but three years earlier the late Mr. Blyth had described a Hawk from Malacca under the name of "*Accipiter nisoides*," respecting which he wrote thus in the 'Ibis' for 1865, p. 28:—"Accipiter (*Nisus*) *gularis*, Temm. & Sehl. (Fauna Japonica), is identical with *Accipiter nisoides*, nobis, from the Malayan peninsula;" and again, in a footnote to p. 240 of the 'Ibis' for 1866, "I recognize in the figure of the female *A. gularis* an exact representation of my *A. nisoides*."

In this footnote Mr. Blyth quoted his original description of *A. nisoides*, which seems to me to bear out his view as to its identity with *A. gularis*; and, if I am correct in this conclusion, the synonymy of the species will stand thus:—

Accipiter nisoides, Blyth, J. A. S. B. xvi. p. 727 (1847).

¹ These are a male from Cochin China and one from East Timor in the British Museum, and the type of "*Accipiter stevensoni*" from Pekin, in the Norwich Museum.

Astur (Nisus) gularis, Temmirek & Sehlegel, Faun. Japon., Aves, p. 5, pl. 2 (1850).
Accipiter stevensoni, Gurney, Ibis, 1863, p. 447, pl. 11.

I have been favoured by Mr. Blakiston with the following wing-measurements of specimens of this Hawk collected in Japan:—

Nine adult males	from 6·30 to 6·90 inches.
Six immature males	from 6·30 to 6·70 , ,
One adult female	7·70 , ,
Seven immature females . . .	from 7·30 to 7·70 , ,

The following are measurements of Japanese examples taken by myself:—

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
Three adult males	6·50	1·85	1·10
	to	to	to
Seven presumed males in immature dress	6·80	1·95	1·15
	6·50	1·85	1·15
Seven presumed males in immature dress	to	to	to
	6·85	1·95	1·30
Adult female	7·55	2·00	1·45
Adult female	7·55	2·05	1·35
Eight presumed females in immature dress	7·40	1·90	1·25
	to	to	to
	8·20	2·15	1·40

A ninth immature female, which I have measured, so materially exceeds the above in its wing-measurement, that I think it well to give its dimensions separately, viz. :—

Wing.	Tarsus.	Middle toe s. u.
in.	in.	in.
8·75	2·20	1·40

This specimen, which is preserved in the Norwich Museum, was obtained from the Messrs. Verreaux, and bears the locality of Japan in the handwriting of the late Jules Verreaux; in plumage it differs but very slightly from a young female collected at Yokohama, which is also preserved

at Norwich, and I therefore believe that it has been correctly identified.

It may be desirable to compare these measurements of Japanese specimens with the following, which I have taken from adults of the same species obtained in other countries:—

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
Six males, China	6.45	1.70	1.00
	to	to	to
	6.80	1.85	1.10
Male, Cochin China	6.55	1.90	1.10
Male, Malacca	6.75	1.85	1.10
Male, East Timor	6.45	1.85	1.20
Five females, China	7.70	1.90	1.20
	to	to	to
	7.85	2.05	1.30
Female, Zamboanga, Philippine Islands	7.50	1.87	1.16 ¹
Female, Singapore	7.25	2.00	1.15
Female, Java	7.40	2.00	1.15
Female, Java	7.45	1.90	1.25
Female, Sumatra	7.65	1.90	1.35
Off coast of Cochin China	7.85	2.00	1.35

As already remarked, I have hitherto supposed the Japanese Hawk, which I now refer to *Accipiter nisoides*, to be identical with the northern race of *Accipiter virgatus*: I was chiefly led into this error by the lack of adult examples from Japan, and by the circumstance that the majority of immature specimens of *A. nisoides* in the first year's plumage greatly resemble *A. virgatus* at a corresponding age; but I am now of opinion that all the Japanese and Chinese Sparrow-Hawks of the genus *Accipiter* which I have examined (exclusive of specimens of *A. nisus*) should be referred to *A. nisoides*; but all those that I have seen from Formosa to the large Himalayan race of *A. virgatus*, for which I propose, as subsequently to be explained, to use Hodgson's subspecific name of "*affinis*."

¹ The measurements of this specimen are extracted from the 'Proceedings of the Zoological Society' for 1878, p. 938.

An adult of the large race, apparently a female, obtained in Native Sikkim and sent to this country by Mr. Hume, was described in 'Stray Feathers,' vol. viii. p. 440, by Mr. Sharpe in the following words:—

"General colour brown, with a bronzy gloss; the feathers of the back somewhat greyish on their edges; head deep slaty grey; sides of face and ear-coverts chocolate-brown; the hinder part of the cheeks somewhat washed with tawny where they adjoin the sides of the neck; throat white, with a few ashy, blackish feathers forming a streak down the centre; the cheeks also slightly streaked with ashy black; rest of under surface white; the under tail-coverts entirely so; the breast blotched with pale tawny rufous; in the centre feathers these markings being in the form of broad streaks, in some of them broken up into bars, forming a uniform surface on the sides of the upper breast; the whole of the breast, belly, and flanks barred with pale tawny rufous; the bars of about equal width; under wing-coverts yellowish white, spotted with brown, the greater series and axillaries barred across with brown, resembling the inner lining of the quills, which are yellowish white at base, greyish at tip, crossed with distinct broad bars of darker brown; wing-coverts above brown like the back; quills light brown, barred across with darker brown, the bars being six in number on the primaries, not including the dark end of the feather; tail-feathers ashy brown, crossed with four broad blackish bands, on the outermost feather seven, not counting the dark ending to the feather. Total length 13·5 inches, culmen 0·95, wing 8·35, tail 6·8, tarsus 2·3, middle toe 1·55."

Mr. Hume has given the following additional wing-measurements of Himalayan examples of this race in 'Stray Feathers,' vol. ix. p. 231, under the name of "*Accipiter gularis*":—

	in.	in.
Nine males	7·60	to 7·80
Eight females	8·00	to 8·20

The following are measurements of presumed females of

this large race taken by myself from specimens obtained in different localities not far removed from the Himalayan range:—

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
Scinde	8.25	2.10	1.50
Sikkim	8.40	2.40	1.55
Ditto	8.50	2.10	1.60
Nepal	8.05	2.15	1.55
Ditto	8.10	2.20	1.50
Assam	8.40	2.40	1.55

I have also measured the following specimens from Formosa in the Norwicheh Museum and in the collection of Mr. Seebold, who has kindly lent me his examples:—

Males.

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
Immature	6.70	2.05	1.30
Ditto (sex marked by Mr. Swinhoe)	6.80	2.15	1.50
Ditto. ditto.....	7.15	2.05	Imperfect.
Adult ditto.....	7.15	2.10	1.40
Adult.....	6.90	2.10	1.30
Adult.....	6.90	2.10	1.25

Female.

Adult.....	8.70	2.20	1.40
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It is remarkable that while the only Formosan female I have seen is larger than any of the Himalayan females above referred to, the Formosan males are, on the contrary, smaller than the Himalayan, though, with one exception, they exceed in size the males of the typical *A. virgatus*.

This female from Formosa, which is preserved in the Norwicheh Museum, agrees generally with Mr. Sharpe's description, which I have quoted above, of a female from Native Sikkim; but the following particulars as to the

markings on the under surface of the Formosan female will show that some few differences exist, leading, I think, to the inference that the Formosan is the older bird of the two:—On the throat and on the central portion of the jugulum the feathers are black, edged with white; the sides of the jugulum and upper breast are chocolate-brown, but the central portion of the upper breast exhibits alternate transverse bands of dark brown and of white, the white bars being so extended as somewhat to encroach upon the lateral area of chocolate-brown; similarly alternating cross bars of brown and white extend over the remainder of the breast, the abdomen, the flanks, and the thighs; on the under tail-coverts the brown bars are imperfect, and much more widely separated, the white interspaces being in consequence considerably larger.

In the adult Formosan males the patch of chocolate-brown, which in the female just described exists on either side of the jugulum, extends downwards by the side of the breast, and in one specimen by the side of the abdomen also, and considerably contracts the central space occupied by the alternate brown and white bands; the white cross bars on the thighs are also narrower in the males than in the females, and in one male the under tail-coverts are entirely white.

The larger form chiefly differs, as regards coloration, from the typical *A. virgatus* (the range of which is decidedly more southern, though both races inhabit the most northerly parts of India¹) in the bright rufous which usually characterizes the under surface of the old males of *A. virgatus*, being replaced in those of the Northern race by a non-rufous chocolate-brown.

In size the typical *A. virgatus* is decidedly the smaller race of the two; combining measurements of this form recorded by Mr. Sharpe in 'Stray Feathers,' vol. viii. p. 441, by Mr.

¹ Mr. Hume states that the larger race "occurs in the Himalayas from Sikkim to Mussoorie," and that "the true *virgatus* also occurs in this same region, and also further west in the Himalayas." (Vide 'Stray Feathers,' vol. ix. p. 231.)

Hume in vol. ix. p. 231, and by Major Legge in the 'Birds of Ceylon,' p. 26, with others taken by myself, I have arrived at the following results :—

Males.

	Wing.	Tarsus.	Middle toe s. u.
	in.	in.	in.
One, Darjeeling.....	6.50	1.85	1.35
One, Malabar	6.20	1.95	1.20
Six, Ceylon	{ 6.00 to 6.40	{ 1.80 to 2.05	{ 1.10 to 1.25
One, Pegu	6.75	1.85	1.25
One, Malacca	6.70	1.90	1.25
Three, Java	{ 5.80 to 5.90	{ 1.70 to 1.90	{ 1.15 to 1.25

Females.

	Wing.	Tarsus.	Middle toe s. u.
One, Madras	7.50	2.25	1.40
Three, Andamans	{ 7.30 to 7.50		
Four, Malay Peninsula and Singapore	{ 7.00 to 7.50		

I am disposed to think that it is justifiable to adopt, as a subspecific designation for the large Northern race of *A. virgatus*, Hodgson's name of "*affinis*."

"*Accipiter affinis*, Hodgson," was published without a description in Gray's 'Zoological Miscellany' for 1844, p. 81, and was based on No. 35 of the series of coloured drawings presented by Mr. Hodgson to the British Museum; a skin is also preserved in the Museum which is believed to be the original of that drawing.

Mr. Seeböhm, who has kindly examined this specimen at my request, informs me that it is "apparently a young male

A. virgatus,” with a wing-measurement of 7·40 inches. The specimen is not sexed, neither is the sex noted on the drawing, and the bird may therefore be either a young male of the larger or a young female of the smaller race. The locality whence it was obtained is, however, recorded as Nepal, and it may therefore very probably be a male of the larger form.

Under these circumstances it seems to me to be better to apply Hodgson’s name of “*affinis*” to the larger race than to coin for it a new subspecific designation; and I have accordingly adopted that course in the present volume.

Accipiter affinis is not the only geographical race which apparently merits subspecific distinction from the typical *A. virgatus*; the nearly allied Hawk of the Philippine Islands (which should probably bear the subspecific name of “*manillensis*, Meyen,” included in Mr. Sharpe’s ‘Catalogue’ amongst the synonyms of *A. virgatus*) is remarkable for having the rufous colouring of the breast as strongly developed in the adult female as in the male, which I believe is never the case in the typical *A. virgatus*¹; and, in addition to this, it also differs from *A. virgatus* in the somewhat browner and less slaty tint of the upper surface, and in the dark gular stripe being, in some adult specimens, much less distinctly marked.

The type specimen of Meyen’s “*Nisus manillensis*,” which was obtained, as its name indicates, at Manilla, is preserved in the Berlin Museum, where it was examined by Mr. Sharpe, who informs me that it is, in his opinion, an immature specimen of the race above referred to; and I adopt the name accordingly, though I have not seen a specimen altogether agreeing with Meyen’s figure, which probably represents, and perhaps not very accurately, a stage of plumage intermediate between that of the first year and that which the bird finally assumes.

¹ Major Legge, writing of *A. virgatus* as found in Ceylon, where it attains a very rufous plumage on the underparts, remarks that “the female appears never to acquire the uniform rufous breast of the male” (*vide* ‘Birds of Ceylon,’ p. 28).

I have examined four adults of this subspecies, from which I have taken the following measurements :—

	Wing.	Tarsus.	Middle toe s. u.
No. 1. British Museum, from Philippine Islands, collected by Mr. Cuming; presumably ♂	in. 6.25	in. 2.00	in. 1.15
No. 2. Collection of Capt. Wardlaw Ramsay, from Manilla; presumably ♂	6.90	2.00	1.25
No. 3. Collection of Capt. Wardlaw Ramsay, from Zamboanga; marked ♀ by Mr. Everett	7.10	2.10	1.40
No. 4. British Museum, from Philippine Islands, collected by Mr. Cuming; presumably ♀	7.30	2.20	1.40

Specimen No. 3 in the above list was sent to the late Lord Tweeddale, together with two very young birds, probably of this species, and a typical adult female of *A. nisoides* (= *stevensonii*), all four having been obtained by Mr. Everett within ten miles of Zamboanga, in the Island of Mindanao, in April 1878: the four skins were kindly lent to me by Lord Tweeddale, and I expressed an opinion, which I now find to have been erroneous, that they were all referable to "*Accipiter stevensoni*," thinking that the bird which I now consider is an adult of *manillensis* was probably a somewhat abnormal female of the species which I had called *A. stevensoni*, though I was so far doubtful of such being the case that I wrote to Lord Tweeddale that "if it should ultimately prove distinct it would by no means surprise me."

Lord Tweeddale described the four skins in the 'Proceedings of the Zoological Society,' 1878, p. 938, also figuring very accurately, at pl. 57 of that volume, the specimen now under consideration; and, acting on my mistaken suggestion, he applied to all four the name of "*Accipiter stevensoni*."

The measurements which I have given above of this example (No. 3 on my list) and which I have taken very carefully, differ a little from Lord Tweeddale's, possibly owing to some dissimilarity in the mode of measurement; but the figure in the 'Proceedings of the Zoological Society,' and the description accompanying it, will readily serve to identify this Philippine subspecies; and for the convenience of such of my readers as may not have access to the 'Proceedings of the Zoological Society' I add the following particulars of the specimen there figured and of the other adults of this subspecies which I have examined:—

No. 3. The entire upper surface exhibits a brown colour of medium intensity, but with the crown of the head darker than the back, and with a tinge of dull rufous on the cheeks and ear-coverts, also slightly on the nape, and very slightly on the edgings to the feathers of the least wing-coverts; the tail is of the same hue as the back, but with transverse bars of a darker brown; these are six in number, the uppermost one being, however, very indistinct; the primaries (of which the fourth and fifth are longest and equal) are also brown, cross-barred with darker brown, but with the interspaces above the emargination tinged with buffy white on the inner web; the secondaries are similarly coloured to the primaries; the tertials are broadly blotched with white, limited in some feathers to the inner, but in others extending to the outer web also; the throat is white, with a brown transverse mark and also a hair-like shaft-mark on most of the feathers; the jugulum, flanks, and breast are rich rufous, but the feathers of the breast have concealed transverse whitish bars, and these become apparent and more decidedly white on the abdomen, the plumage of that part and also the thighs and the axillaries being transversely barred with alternate markings of rufous and white; the rissum is white; the under wing-coverts are fulvous, irregularly crossed and varied with brown.

The following is a copy of the ticket attached to this specimen by its collector, Mr. Everett:—"Zamboanga, ♀, April 1878: iris golden; orbital skin greenish yellow; bill

leaden; apex and eere blaekish; legs greenish yellow, but pale brown on the toes; elaws dark brown."

Specimen No. 1, whieh from its small size must, I think, undoubtedly be a male, bears a remarkable resemblance to No. 3, from whieh its coloration only differs in having a more deeided gular stripe formed by the markings on the feathers of the throat, in most of the eoneealed light transverse bars on the breast being a pure white, in the absence of any tinge of rufous on the upper surface, and in having only five dark transverse bars on the eentral reetrices.

Specimen No. 2, whieh is probably also a male, has unfortunately been badly skinned, and portions of the nuchal and abdominal plumage are wanting; but it appears only to differ from No. 3 in the markings on the throat being more tinged with grey, and in the dark cross bars on the thighs being brownish grey instead of rufous; also in those of the axillaries being browner and less rufous, and in the upper surface of the body and wings being of a more slaty blaek hue, with even less tinge of rufous on the nape and none on the least wing-eoverts; like No. 1, it has but five dark cross bars on the tail.

No. 4 is the largest specimen of the series, and I therefore consider it to be undoubtedly a female; it agrees generally with No. 3, and especially in having six dark transverse bars on the tail; but it differs from it in the following particulars:—all the upper surface is slightly browner, and with no tinge of rufous on the nape; the gular stripes are more strongly marked; the white transverse bars on the jugulum and on the breast are not eoneealed, and are a purer white and more numerous than in No. 3, there being two white bars on each feather of the breast, besides a white base; the axillaries agree in tint with No. 2.

The following is a copy of the description given by Lord Tweeddale in his paper in the 'Proceedings of the Zoological Society' for 1878, to whieh I have already referred, of the two nestlings, presumably of this species, whieh were sent over by Mr. Everett at the same time as No. 3:—"Nestlings in rufous dress; underneath creamy fulvous, with broad

ruddy brown stripes; a central gular stripe of brown; middle pair of rectrices with three brown bands; upper surface of body and head dark brown, with rusty margins and bases to the feathers; thigh-coverts spotted with light ruddy brown."

Measurements.

Wing.	Tail.	Tarsus.	Middle toe.
in.	in.	in.	in.
5.75	4.00	1.81	1.25
5.12	4.00	1.62	1.06

Mr. Everett notes on the tickets attached to these specimens that he obtained them both in April at Zamboanga, and that the first (a male) had the "iris yellow, bill black, legs light green, sole of foot yellow, claws black;" the second (sex doubtful) had the "iris yellow, cere greenish, beak and claws black, legs light greenish, sole of foot yellow."

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